Political representation in different electoral settings. Measuring issue congruence with VAA-generated data

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I certify that all material in this thesis which is not my own work has been identified and that no material has previously been submitted and approved for the award of a degree by this or any other University.

Signature: .....

Abstract

The long line of representation studies posits that proportional representation systems, with larger electoral districts, have a representational advantage over majoritarian systems. However, over the last decade, scholars have challenged this longstanding finding (Blais & Bodet 2006, Golder & Stramski 2007). Additionally, Golder & Stramski (2007) initiated a debate over the conceptualization and measurement of congruence, arguing that the most common practice of assessing congruence is flawed. They call for an improved measure of congruence. In the light of this recent debates, the purpose of this thesis is to inspect the relationship between institutional designs and political representation in the European context, using Voting Advice Application generated data. Three main research questions are explored. The first question relates to institutional designs such as district magnitude, and electoral system characteristics such as disproportionality or polarization, investigating the conditions necessary for a country to present high levels of congruence between its citizens and their representatives. Looking at party level characteristics, I will investigate what are the effects of niche party status and governmental status on issue congruence in European democracies? Last but not least, what is the role of individual characteristics? These questions will be addressed by studying the impact of different features of electoral systems, party and individual characteristics have on political representation conceptualized as issue congruence. Congruence is measured as the degree of matching of the common policy preferences of citizens and parties as indicated by the Voting Advice Applications EU Profiler 2009 and EUvox 2014.

The present work contributes to the stream of research on political representation understood as congruence. The strength of this work lays in its comparative approach, and the use of VAA generated data to measure congruence. While most of the studies on political representation using congruence focus on the Left-Right dimension, this thesis uses the concept of issue congruence. Based on the 28 common statements of the VAA tool, the measure of congruence is metric-free, allowing for cross-country comparisons. Although there is a wide range of research on the effects of electoral systems on political representation, most of these studies are limited in their use of comparative approaches. The lack of extensive comparative research on issue congruence is due to insufficient

data. The 2009 EU Profiler and 2014 EUvox address this issue, providing the necessary framework for testing the predictors of congruence at a system, party and individual level.

Political representation can be operationalized through congruence, as the distance between the citizen and the representative (Huber & Powell 1994, Powell 2004). Issue congruence is the correspondence between party electorates and their representatives across a set of salient policy dimensions (Powell 2004). VAA generated data provides a new means of measuring congruence. I propose two new measures of congruence, based on the distance between the citizen and the party the citizen intends to vote for. Unlike other comparative studies that measure congruence with the help of the Left-Right scale, the present work focuses on issue policies. Issue congruence is the outcome of the match between the citizen and the party she intends to vote for on a series of 28 and 22 political statements.Additionally, the focus on issue congruence is important because issue representation is mostly inferred from the alternative interpretations of congruence. The measures of issue congruence therefore contribute to a better understanding of political representation in the EU political space, tackling the recurrent crisis of representation.

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1 Introduction

1.1 Introduction

Congruence between citizens and their representatives is at the core of any democratic process. However, there is variation across democracies in terms of the strength of the linkage between the public and political elites. Furthermore, there is wide debate in the literature about the functioning of representation processes and about the meaning of congruence for democratic representation. While some scholars argue and present evidence in favour of a strong congruence between citizens and representatives on the Left-Right dimension (Dalton, Farrell & McAllister 2011, Powell 2000), others argue that some of these findings are due to decisions over measurement tools, depicting a slightly different reality (Golder & Stramski 2007, 2010). Also, congruence is mostly inferred from the Left-Right dimension, which may not reflect representation accurately, if we take into account the transformations in the sphere of political parties over the last years (Dalton 2017*b*).

Over the past decades there has been a decline in participation rates and an increase in electoral volatility. At the same time, the structure of political competition became more complex (Dalton 2017*b*). There are new issues entering the political agenda and new parties emerging, that try to engage the floating voters. Thomassen (2012) raises this issue of *the blind corner of representation*, discussing how the new cultural and social issues are not properly represented by the Left-Right dimension. While the link between parties and voters is mediated by partisan identifications, the issues on which parties are differentiating themselves play an important role. If the party identification does not account fully for the vote decision, we need a good assessment of what does. Assuming that the new issues play this role, one needs to identify the issues that bear more weight in the linkage between voters and parties.

This thesis examines whether a broader approach, one going beyond the understanding of the Left-Right dimension, can give a more complete understanding of the contemporary process of representation, while accounting for institutional designs, features of political parties, but also individual characteristics. This thesis looks at the general concept of political representation through the narrower

term of issue congruence.

Societal transformations lead to the emergence of new issues. The new issues that are pushed on the political agenda, such as the immigration or gender issues (Dalton 1996), together with the new parties that bring them forward, are not reflected on the Left-Right continuum. Taking these new issues into account, it can tell a larger story and provide a better understanding of the representation process. A cross-country comparison provides the right framework for analyzing political representation based on issues. As Dalton (1985) points out, the results of an analysis based on a single country would not be meaningful enough, because there are too many issues and not enough parties.

One of the traditional approaches for measuring congruence require the citizens to place themselves and the parties alongside an ideological continuum. Not only is this a demanding exercise on the citizens' part, but the positioning can be inaccurate. Additionally, traditional surveys suffer from low response rates, that affect the quality of the data they produce. Even more, young people tend to be underrepresented, as well the supporters of small political parties. Alternatively, political experts position the parties using party manifestos and distribution of party votes. In a nutshell, data on parties' and voters' positions are scarce and each approach has its limitations. The data generated through two Voting Advice Applications for the election for the European Parliament of 2009 and 2014, EU Profiler and EUvox, are advantageous to the study of issue based congruence because the policy preferences of citizens and parties are measured on the same scale, on a large set of issues.

However, the VAA data comes with a set of drawbacks, stemming from its online nature. The data suffers from a self-selection bias; the profile of a VAA user depicts a young, highly educated person who is also highly interested in politics. As a result, the data is highly unrepresentative of the population at large and any inferences must be treated with caution. The limitations of VAA data are discussed extensively in section 3.6.

The effect of electoral systems on the number of parties, vote-seat disproportionality, social representation and ideological congruence is well researched. The matching of voters and parties on issues is mostly computed in analyses at sys-

tem and party level, disregarding the processes at the individual level. VAA data facilitates the study of individual level characteristics in relation to congruence.

This thesis contributes to the stream of research on political representation understood as congruence. There is an abundance of research on the consequences of electoral systems on representation. Several authors discuss representation in the context of congruence between the voters and parties. The broad literature on representation makes use of different conceptualizations of congruence, based on the underlying assumption of ideological distance between the citizen and the representative. The measures of congruence vary from absolute to relative measures (Golder & Stramski 2010). Few studies employ a relative measure of congruence which provides, to some extent, a metric-free measure, allowing for comparison between different units of analysis. Even fewer studies employ a comparative perspective on congruence and electoral systems.

The strength of this work is that it draws upon the positions of both parties and voters, instead of relying solely on voters' perceptions regarding the party positions. Furthermore, the nature of VAA generated data allows researchers to measure congruence as a relative measure, which is one of the needed advances in congruence studies. I will briefly touch upon this concept later in this introductory chapter, but a thorough explanation of the difference between absolute and relative congruence will follow in chapter three. Issue congruence is defined here as the degree of similarity between the preferences of prospective voters and those of their most preferred party. Data for the degree of similarity is taken as vote intention in the elections to the European Parliament of 2009 and 2014.

1.1.1 Contributions

The contributions made by this thesis are twofold: it addresses the ideological versus issue congruence debate centered around measurement issues, and presents a novel comparative approach to the study of representation focusing on the individual level. The work stems from previous research on issue congruence in a comparative context, carried out by Dalton (1985, 2017*b*). More specifically, it employs the concept of congruence on issue dimensions on data generated through VAAs.

Comparative approach

While most studies on issue congruence focus on one or two countries, due to a lack of data, this research takes a comparative approach, employing data from the European Union member countries. The analysis conducted in this thesis offers a comparative account of representation in European Union countries, offering two snapshots of voter-party congruence, one in 2009 and the second in 2014. Due to data constraints, most studies that look at representation as issue congruence focus on one or two countries. One of the main limitations of using ideological congruence is the lack of comparability, due to the fact that the political Left and Right have different meanings across different electoral contexts (Belchior 2013). Focusing on issue rather than ideological congruence allows for cross-country comparisons, as the ambiguity of the Left-Right is no longer an issue.

Issue congruence

Rather then focusing on ideological congruence, I focus on issue congruence, tackling the problem raised by Thomassen & Schmitt (1999), concerning the blind spot of representation. They argue that the new societal changes are not represented by the Left-Right dimension. An issue based approach addresses this critique.

Issue dimensions

Furthermore, rather than investigating congruence issue by issue, measures of congruence are created for policy dimensions, namely the economy, social issues and the EU. Additionally, rather than measuring issue congruence issue by issue (Lax & Phillips 2012), the issues are compiled into issue dimensions, which offers a new perpective on representation. The decision to compile the issues follows the work of Dalton (1985), Dalton et al. (2000). As Dalton (1985, 2017*b*) shown, the voter party congruence varies not only across parties, but also across issue domains.

Absolute citizen and *relative* measures of congruence

Another important contribution concerns the measure of congruence employed. The most popular approach for assessing congruence is to compute it as an ab-

solute value, but recent studies show that employing a *relative* measure.[1] yields different results. For that reason, I use both an *absolute* and a *relative* measure, contributing to the debate raised by Golder & Stramski (2010) Given the comparative nature of the analysis, a *relative* measure of congruence is the preferred approach. Employing a *relative* measure helps to overcome one of the major setbacks of the Left-Right dimension: the ambiguity of the concept and the different meanings it carries across different contexts, that causes serious problems when cross-country comparisons are made.

Individual level predictors

Last but not least, this thesis focuses on an analysis of individual characteristics as predictors of congruence. With the exception of one study (Walgrave & Lefevere 2013), studies of political representation focus on system and party level determinants, neglecting the characteristics of individuals.

With most of the studies focusing on a single level of explanation, such as the features of parties or party systems, there is a lack of scholarly literature on congruence dealing with voter characteristics with the exception of Walgrave & Lefevere (2013). This thesis concentrates on the individual level, as it is an understudied area in congruence studies. As Walgrave & Lefevere (2013) correctly point out, tackling the puzzle of representation at the voter level may represent the best strategy, because it is the voter who tries to match her policy preferences to a particular party.

The research is carried out by analyzing the impact of predictors at three levels of analysis. At the political system level, I study the features of the electoral system, such as polarization, the effective number of parties, district magnitude, disproportionality and the status of the democracy, as an old or new one, in relation to issue congruence. At the party level, the focus switches to the status of the party as centrist, niche or mainstream, governmental or non-governmental, whilst accounting for the election cycle. At the individual level, level of political interest, education and demographic information such as age and gender is analyzed. I hypothesize that countries with a higher degree of proportional representation, polarization, number of political parties and higher district magnitudes possess

[1] Argued as being superior

higher levels of congruence (see chapter 5). Furthermore, I will test whether centrist, niche and high governmental status parties have higher levels of congruence with their supporters, while controlling for the election cycle(see chapter 6). Finally, the expectation is that increased education and interest in politics are positively associated with congruence (see chapter 7).

These hypotheses are tested using data generated by the 2009 EU Profiler and 2014 EUvox, two voting advice applications (VAAs) developed for European parliament elections. These data are ideal for the measurement and comparison of congruence in relation to issue policies across European democracies. Unlike most comparative studies that assess congruence with the help of Left-Right scale, this thesis employs a proximity-oriented logic and calculates the match between the citizens and their most preferred party based on a series of 28, respectively 22 political statements. VAAs generate large amounts of data on their users' political preferences, data that can be then used in tackling questions regarding the quality of representation beyond ideological congruence, having users and parties measured on the same scale.

1.1.2 About the data

Traditional survey methods, such as RDD (random digit dialing), have experienced an increasingly steep decline in response rates, due to the public's reluctance to answer phone surveys and new methods of screening unsolicited calls (Wang et al. 2014). The low response rates in the traditional survey methods means that even if the original pool of respondents was representative of the population at large, those who end up participating in the survey might not be (Wang et al. 2014) and the data would need post-stratification adjustments. Consequently, it will not come as a surprise that the popularity of online samples has increased over the last years. With proper statistical adjustments, non-representative data can resemble a representative sample. As a consequnece, researchers can turn to other sources of data, often times non-representative ones, such as the VAA.

VAA generated data is best suited for the analysis of political preferences. It is the only source of data that has citizens and parties expressing their political preferences across the same items, on the same scale. VAA generated data of-

fers information on 30 policy issues, including the economic issues that usually belong to the Left-Right dimension. Additionally, it includes GAL-TAN issues. Therefore, it is possible to measure congruence on a wider range of issues, contributing to a more reliable measure of issue congruence. Another major benefit of this approach is that while citizens place themselves on the issues, they do not place the parties. The parties are coded by a team of political experts, which potentially adds more validity to party placements. Rather than considering the representation only from the perspective of individual citizens, this approach tries to eliminate some of the bias inherent in congruence studies.

The data on which this research is based was generated by two Voting Advice Applications, developed for the elections to the European Parliament of 2009 and 2014, EU Profiler and EUvox. As briefly stated above, VAA data provides an excellent ground for the study of political representation understood as congruence. While previous work largly dealt with a single level of explanation, system or party level, VAA data brings an important contribution, by recording individual characteristics. Therefore, in addition to testing for the effect of predictors at the electoral system and party level, we are able to test for individual level predictors.

Although VAA generated data suffers from socio-demographic bias, being concentrated on young, highly educated individuals, living in urban areas, it holds a significant advantage, having a high number of users. The large amount of users allow researchers to systematically study small social groups. Furthermore, it reaches groups such as young people or niche party supporters, who are not easily accessible through traditional surveys.

An additional bias produced by VAA respondents is the high level of political interest. Being more interested in politics, it is very likely they are more knowledgeable about politics and therefore more likely to be familiar with the party they intend to vote for. High levels of congruence in a certain electoral setting may not reflect the truth, due to the fact that the analysis focuses on individuals with high levels of education and political interest, from urban areas. The bias inherent in the VAA data will be tackled in the research design chapter.

In a nutshell, this thesis offers a cross-country analysis of political representation

in the European Union democracies. The analyses will be carried out at political system, party and individual levels respectively.

1.1.3 Structure of the thesis

The introductory chapter continues the literature review of approaches to the study of political representation, and on assessing political representation through congruence. This is followed by a section on Voting Advice Application, in which the potential held by VAA data is discussed. The chapter ends with a section on assessing issue congruence with VAA generated data.

The second chapter develops the ideas laid out in the introductory chapter, referring to the recent debates in congruence studies on which this thesis is built, then proceeds by presenting the main theoretical approaches to the study of political representation, such as the focus on citizen's votes versus citizens' preferences, and the ideological versus issue congruence debate. The last three sections focus on electoral system, party characteristics and individual level predictors of congruence. Each section includes a review of the most relevant studies in the field of issue congruence, the context to the current research, and finally the working hypotheses are explained.

The third chapter discusses the research design. I discuss the methods employed and the data used. The most substantial part of this chapter is dedicated to the central element of the thesis - issue congruence, with subsections explaining the conceptualization and measurement of congruence in representation studies. This is followed by a description of the conceptualization and measurement of congruence using VAA data. The approaches taken to measure congruence, the *absolute citizen* and the *relative* one are presented, emphasizing the advantages and disadvantages of each. After introducing the measures of congruence, I cluster the issues into issue dimensions. The next section focuses on instrumentation and measures, where the predictors used to test the hypothesis are explained. The chapter ends by addressing the validity and limitations of VAA data, briefly touched upon in the introductory chapter. The fourth chapter is the first of three empirical chapters, focusing on system level predictors of congruence. The fifth chapter is centered around party characteristics in relation to issue congruence. The third and last empirical chapter addresses individual level characteristics,

furthering the discussion about the importance of issue congruence and issue dimensions. The seventh chapter is dedicated to conclusions, limitations and plans for further research.

1.2 Studying political representation

Political representation lays at the heart of any democratic process (Dalton 1985). To assess the well functioning of a democracy, we need to have a good understanding of the underpinnings of the representation process.

Huber & Powell (1994) provide an overview of political representation, emphasizing the distinction between the popular (Dahl 2000) and elitist (Schumpeter 1942) views of democracy. The former argues that one the main objectives of a democratic system is the accurate representation of citizens' interests. The role of representatives is to facilitate citizens' demands as much as possible. On the contrary, the elitist viewpoint argues that political representation is a means for selecting and controlling politicians (Peffley & Rohrschneider 2007). Popular control is restricted, in order to allow expert politicians to make competent decisions. Accordingly, citizen control is restricted to selecting representatives, without a say in agenda setting or the policy implementation process. This thesis supports the popular view of democracy, in which politicians follow citizens' preferences, contributing to the improvement of the quality of democratic performance.

Dyadic versus collective representations

The vast literature on political representation accommodates a series of approaches for studying the matching between citizens and political elites. Early research on political representation focused on the dyadic opinion-policy relationship (Miller & Stokes 1963), which assessed congruence as the relationship between the mean constituency opinion and a single representatives. Later, the focus shifted to collective representation, where congruence was measured as the relationship between the mean constituency opinion and multiple legislators (Weissberg 1978, Dalton 1985).

Static versus dynamic

Up until this point, the studies of political representation presented a rather static

perspective; later studies identified a dynamic in the relationship between public opinion and policy (Stimson et al. 1995, Wlezien 1995, 1996). The dynamic approach is based on the idea that the responsiveness of policy makers to the public demands lays at the core of representation. Easton (1979) argues that the government's policy responsiveness is marked by change and therefore what one should look at is dynamic representation rather than static, measured at one point in time. Responsiveness has been defined as representatives acting in the benefit of the represented (Pitkin 1967), when governments form and implement the policies citizens want, creating a chain of responsiveness (Powell 2004).

Institutional dimensions versus roll call studies

Another tradition in representation studies focuses on institutional dimensions and roll call behaviour studies. Institutional design features such as electoral formulae, the size of the parliament and the frequency of elections are scrutinized as influencing political representation at the institutional level (Cox 1997, Lijphart 1990, Rae 1967). More recent studies adopted a comparative approach in studying political representation, revealing that government responsiveness is moderated by institutional designs (Golder & Stramski 2010, Huber & Powell 1994, Powell 2006, Bingham Powell Jr 2009, Blais & Bodet 2006).

The other stream of research relies on the translation of citizens' preferences into laws (Clinton 2006, Weissberg 1978, Converse & Pierce 1986, Barabas et al. 2011). The roll call behavior studies cover the area of political representation dealing with which types of laws are voted for, what the representative does inside the parliament (voted in support or against a law), and what the representative stands for. These studies touch upon the social and symbolic dimensions of representation.

As Golder & Stramski (2007) argue, it is possible to think of representation as having two components, responsiveness and congruence. Responsiveness describes dynamic representation, while congruence is a static concept. This thesis follows a static representation approach, investigating how parties match their stances on issues with the political preferences of their supporters. As mentioned earlier, I analyze two snapshots of representation in European Union countries, one in 2009 and another in 2014. To some extent, this allows to observe change

in the patterns of political representation.

Golder & Stramski (2007) make a salient point about the conceptualization of congruence. They argue that to a large extent, existing studies of representation 'fail to address how ideological congruence is most appropriately conceptualized given their research goals'. They identify that often times, the conceptualization of congruence is driven by data availability and convention (Golder & Stramski 2007). In this thesis, congruence is a measure of how accurately the voters' preferences are mirrored by the political parties they intend to vote for. There are multiple ways of looking at representation. In what follows, I will present different conceptualizations of congruence and the arguments for the approach used in this thesis.

1.2.1 Conceptualizing congruence

In its most basic form, congruence can be assessed as the distance between a citizen and her representative (Dalton 1985, Thomassen & Andeweg 2004), where the representative can be a candidate, a political party, a member of the parliament or a member of the government. For explanatory purposes only, the term 'representative' is used to illustrate all of the above. In what follows, the types of congruence identified in the scholarly literature are discussed, which will help to build the argument around conceptualizing congruence as a many-to-one relationship.

To start with, it is important to distance congruence from the dyadic and collective representation. These types of representation look at the mean constituency opinion, with dyadic representation looking at the relationship between the mean constituency opinion and a single representative. Contrastingly, collective representation assesses the mean constituency opinion on one side, and multiple representatives on the other side.

In accordance with Golder & Stramski (2010, p. 90), one can think about congruence in the following ways: as the relationship between a single citizen and a single representative (a one-to-one relationship), many citizens and a single representative (many-to-one relationship), and finally, many citizens and many representatives (many-to-many relationship) (see Figure 1).

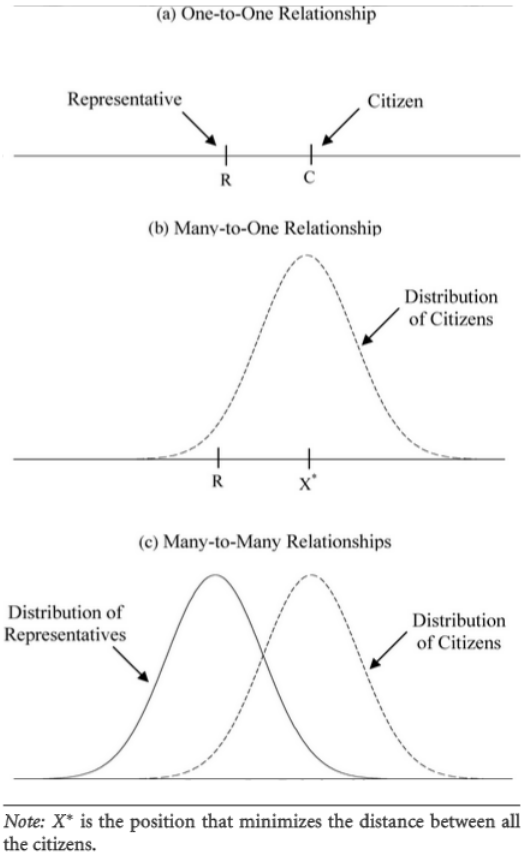

Figure 1: Conceptualization of Congruence, Golder and Stramski (2010)

One-to-one

A *one-to-one* relationship illustrates the most simple type of congruence, as the absolute distance between the positions of the citizen and of the representative. Being a proximity measure, as the distance between the two gets smaller, the congruence increases. Although from the citizen's perspective this is the most important type of congruence, Golder & Stramski (2010, p. 44) argue that this way of conceptualizing congruence is not very useful, because the representative has to mirror the preferences of more than one citizen, aiming for the democratic ideal of equal representation. However, as Golder & Stramski (2007) say, it is a great building block for the next conceptualization of congruence.

Many-to-one

A *many-to-one* relationship is the most popular method of assessing ideological congruence in American and comparative studies of representation. This relationship can be interpreted as a relationship between many citizens and one representative, for example between many citizens and a government. This type

of congruence can be conceptualized in three different ways: as absolute median citizen congruence, absolute citizen congruence, and relative citizen congruence.

The absolute median citizen congruence focuses on the most preferred policy position among citizens. It minimizes the sum of absolute distances between citizens, and in a one dimensional space, it is the median, not the mean position. The disadvantage of this approach is that by focusing on the median citizen, the information about the distribution of the citizens preferences is ignored.

The *absolute citizen congruence* looks at the average absolute distance between all citizens and the representative. It takes into account the ideological positions of all the citizens, not just the median citizen. Currently, only two studies, Blais & Bodet (2006) and Golder & Stramski (2010) use this conceptualization that has origins in the work of Achen (1977). Although there are sources of data that could enable the application of this conceptualization, (such as World Value Survey, European Value Survey, Eurobarometer), the most common practice is to use the information on citizens' political attitudes solely for assessing the position of the median citizen.

Lastly, *relative citizen congruence* looks at the distance between citizens and the representative.[2] relative to the dispersion of citizen preferences (Golder & Stramski 2010) The conceptualization of relative citizen congruence is most appropriate when comparing congruence across different units of analysis, such as countries. While *absolute citizen* congruence is appropriately used only when the Left-Right dimension is perceived in the same manner across the units of analysis, *relative* congruence is a metric free concept, discarding the use of an abstract Left-Right scale. Most of the comparative studies on congruence, with the exception of Blais & Bodet (2006), Golder & Stramski (2007), which focus on the position of the median citizen, do not capture substantive differences within the Left-Right scale across different countries. Golder & Stramski (2010) make a good case for the use of a *relative* measure of congruence, compared to *absolute median citizen* and *absolute citizen* congruence, while concluding that scholars need to justify the conceptualizations they use, and to provide robustness checks by testing alternative conceptualizations. More recently, Giger & Lefkofridi (2014) used Golder & Stramski's (2010) conceptualization, building

[2]Which can be a government or a political party

a salience-based measure of congruence to represent the individual distance between a citizen and the party the citizen voted for, measured on the Left-Right dimension.

Many-to-many

Many-to-many is the relationship between many citizens and many representatives. While the previous two types of relationships centered on one actor, the legislator or the government, here the focus is on the collective body of representatives. To my knowledge, this approach was employed only by Golder & Stramski (2007).

Golder & Stramski (2010) offer an exhaustive conceptualization of congruence, presenting the advantages and disadvantages of every approach. After reviewing different conceptualizations, I argue for the measure put forward in this thesis, which is a *many-to-one* measure of congruence. As shown above, under the *many-to-one* conceptualization there are three different ways of measuring congruence. In this thesis, I will use both the *absolute citizen* and the *relative* approaches of measuring congruence. Although the different conceptualizations of congruence presented above focus on ideological congruence, the reasoning behind them can be applied to issue congruence as well. The methodological chapter has a section dedicated to the measure of congruence, where I review the main approaches of assessing congruence and reiterate the choice for an *absolute citizen* and a *relative congruence* measure, conceptualized as a *many-to-one* relationship.

The VAA generated data offers information on the political preferences of citizens and the positions of parties measured on the same policy issues, on the same scale. This allows one to employ *absolute citizen* and *relative* congruence measures. By using issues, and not positioning on an ideological continuum, the limitations associated with the the Left-Right dimension are avoided. While scholars of ideological congruence looked at the position of the government or of the legislators during the electoral cycle, in this study the focus is on the political parties. The analyses in this study are based on an individual measure of congruence: the distance between each VAA user and its most preferred party. These analyses employ both *absolute citizen* and a *relative congruence*approach.

1.2.2 Ideological versus issue congruence

Powell (2000) argues that the electoral choices are not accurate reflections of voters' preferences. This is due to the fact that electoral choices are shaped and constrained by the electoral system. When casting a vote for a particular party, there is no credible way to say whether the party represents the voter's political preferences. The voter may vote for the party only because it is "the best of unpalatable alternatives or as a nearly random pick among equally desirable parties" (Powell 2000, p. 161). Furthermore, voting choices do not indicate how a voter relates to the other parties competing in a election. In the absence of this information, even in majoritarian systems, the representatives should be skeptical about their representativeness upon the plurality.

In the pursuit of a more direct measure of citizens' preferences, a "substantive correspondence", Powell (2000) uses the concept of "representational congruence", measured as the self-placement on the Left-Right scale. The decision to use the Left-Right scale is based on the assumption that in most modern democracies, the Left and Right represent a unidimensional discourse, familiar to voters and elites. The Left-Right continuum proved to be effective in assimilating the political stances and reducing them to a single dimension, transforming it into the most widely available method for measuring citizens' preferences (Powell 2000, p. 162). This concept, however, has a series of shortcomings, which I will address in section "From ideological to issue congruence", in chapter three. In Powell's concept of "representational congruence", elections are efficient tools for democracy when the governing parties are close to the citizens on the Left-Right dimension. Conversely, the further away from the positions of citizens, the less efficient elections are in generating representational congruence.

Focusing on the role of political parties, Dalton (1985) examined the process of political representation, looking for evidence of voter-party agreement. While the best single measure of voter-party correspondence proved to be based on the comparison of self-placements on the Left-Right scale, his results give a more complex story. Comparing the opinions of parties and voters on 40 party dyads, Dalton (1985) found out that in some instances the correspondence is stronger than in other. For example, voters and parties were closer on matters related to economic and security issues, but further apart on the topic of foreign policy. Re-

examining the hypotheses developed in his earlier work, (Dalton 1985), Dalton (2017*b*) has shown that while being closer to their voters on economic issues, parties do less well when it comes to cultural issues, such as immigration and gender policy.

While both studies presented above discuss congruence between citizens and their representatives, the approaches they take are different. Powell (2000) focuses on ideological congruence, while Dalton (1985) focuses on issue congruence. In what follows, I will focus on the differentiation between the two, building the argument for the approach I follow, namely issue congruence.

In the long line of representation studies, scholars have used two methods to assess the similarities between the political preferences of citizens and those of their representatives. One approach requires that the policy preferences of citizens and elites are being summarized by ideology scores. Alternatively, this relationship is assessed by comparing the citizens' views and the representatives' positions issue by issue. Most often, issue congruence is assessed as a distance measure between the position of the voter and that of the representative. In line with Broockman (2015), I argue that the former approach is fundamentally flawed. Broockman (2015) builds his critique around the idea that ideology scores are misinterpreted as summaries of policy preferences, when in fact they measure consistency.

Another caveat of using ideology in representation studies is that one does not know the latent mapping from the diffuse measure represented by ideology to the actual policy choice (Lax & Phillips 2012). The wide use of ideology in responsiveness studies is explained by the scholarly assumption that asking voters to define policy preferences is too demanding, but also because of the lack of comparable data on voters' preferences. The section on VAA data in the research design chapter touches upon this issue.

The first approach employs a measure of ideology (Broockman 2015), which misinterprets the ideological positioning as a summary of policy preferences. More exactly, the issue positions are summarized by a point on a scale (i.e. Left-Right, liberal-conservative) (Bafumi & Herron 2010, Bonica 2013, Caughey & Warshaw 2014, Rogowski & Tucker 2014). In the second approach, the relationship is assessed on multiple issues, one issue at a time (Lax & Phillips 2012, Canes-Wrone

& Shotts 2004, Gilens & Page 2014). The main challenge to the ideological approach is that in reality, it captures the 'degree of ideological consistency across policy domains [...] but says little about citizens' views within domains, on issue themselves' (Broockman 2015, p. 2).

For a better understanding of consistency of views within and across resdomains, one can imagine the use of an ideological scale. Usually, the scale is constructed from multiple binary answers to survey questions for voters, and roll call behaviour for elites; an extreme position can be achieved if the voter (representative) gives extreme answers, on the same extremity (i.e. only leftist positions). When the answers are extreme on both sides (i.e. both on extreme left and extreme right), the voter (representative) receives a score at the middle of the ideological scale. Therefore, someone with extreme views is labeled as a moderate, a representation which is far from reality (for a more detailed explanation, see Broockman 2015). However, a voter or representative who takes extreme positions is not ideologically extreme, she is ideologically *consistent*. Accordingly, a voter or representative who gives answers on both extremes is not ideologically moderate, she is ideologically *mixed* (Broockman 2015). Therefore, what one measures with this approach is *ideological consistency* rather than ideology per se.

Based on the ideological approach, it is assumed that voters do not have distinct views on distinct policies other than what their ideologies prescribe. Accordingly, inferences about a voter or a representative can be drawn using a score attained from an ideological scale. Broockman (2015) shows that most of the studies of political representation use this measure of ideology, which in fact measures ideological consistency. His main argument is that, as illustrated above, an ideological scale does not capture accurately views on individual policies. Following this line of reasoning, the results of the studies on political representation can be significantly distorted (Broockman 2015, p. 29).

To date, the correlation between voter ideology and aggregated state policy is the dominant approach in the studies of policy responsiveness (Lax & Phillips 2012). Erikson et al. (1993) were the first to argue that policy and ideology lack a common metric. Consequently, one cannot know exactly how preferences should ideally translate into policies. Furthermore, the focus on ideology-policy

correlation does not allow for insights into whether representatives are responsive on specific policies, not only at the aggregated level. Although policy responsiveness and congruence are both forms of political representation, they represent different dimensions of democratic performance (Lax & Phillips 2012). All these aspects need to be carefully considered when dealing with issue congruence as a means to assess political representation.

A differentiation between responsiveness and congruence is necessary. Although both are forms of policy representation, they refer to slightly different phenomena. According to Lax & Phillips (2012), responsiveness captures a positive correlation between opinion and policy, while congruence reflects whether policies match the opinion of the majority. More importantly, the presence of responsiveness does not necessarily imply congruence.

The last argument I present that supports my choice to use issue congruence, and probably the most important one, was put forward by Thomassen (2012). He cautioned the representation scholars about the so called 'blind corner' of representation. He argues that the assumption on which most of the congruence studies are based is flawed, assuming that 'representativeness on the Left-Right dimension automatically implies representativeness on a range of other issues'. The evidence for this argument derives from the emergence of new issues, cultural and social, that do not follow Left-Right lines. Thomassen's (2012) argument complements one of the arguments brought as a motivation for this study: namely that as the political spectrum expands, with new issues brought up by societal changes, these issues do not fit into the Left-Right dimension.

The congruence studies in the tradition of Miller & Stokes (1963), Converse & Pierce (1986), Kitschelt (1999) look at the similarities between the values and preferences of citizens and those of their representatives. Here, political representation is seen as a mirroring of citizens' preferences. With one noticeable exception (Converse & Pierce 1986), most research focuses on one dimension of political representation, acknowledging that one component cannot characterize the whole process of representation.

This thesis adopts a similar position. Although political representation cannot be fully captured in the comparison between citizens' and representatives' prefer-

ences, it tells us something about the quality of democracy and the way in which citizens' preferences are mirrored by the political agenda (Kitschelt 1999, Roberts 2009). Assessing political representation through issue congruence creates an image that reflects citizens' preferences, rather than limiting representation at the effects of institutional designs. Nonetheless, it offers a more substantive and transparent measure. Kitschelt (2000) brings an important critique to this approach, arguing that the focus on issues implies a programmatic assessment of political parties that citizens may find difficult to make. However, the data used in this thesis, solves this critique because citizens do not place the parties on policies, experts do.

In this thesis, congruence is used as a means of assessing political representation, as a *many-to-one* type of relationship. This is issue congruence and not ideological congruence. Additionally, congruence is assessed by using two approaches, influenced by a debate in the recent studies of representation (Golder & Stramski 2010). In addition to assessing an absolute measure of congruence, a relative measured is also used. Golder & Stramski (2010) argue that while absolute congruence can be assessed only when the Left-Right dimension is perceived similarly across all contexts, the measure of relative congruence avoids the use of an abstract scale (i.e. the Left-Right scale), providing a metric-free measure of congruence (Golder & Stramski 2010). However, given that it is an issue congruence I focus on rather an ideological one, and because the issues are the same across countries, the the decision to use an absolute measure in a comparative analysis does not compromise the results of this research.

Eulau & Wahlke (1978) warned the scholars of political representation that the concept of representation should not be reduced to issue congruence. The concept of political representation is more complex than a simple comparison between the preferences of citizens and those of their representatives. While acknowledging and subscribing to this view, I argue that the snapshots of congruence selected in this research tell us something about the quality of representation and the quality of democracy. Furthermore, by looking at issue congruence on issue domains we get insights into how on citizens receive an unbalanced amount of representation on different issues.

In addition to the arguments brought forward above, that make a strong case for

the use of issue congruence over ideological congruence, timeliness needs to be considered. With new issues entering the political agenda, we ought to pay more attention to the extent to which issues are mirrored by the policies on offer.

I will revisit this argument in the next chapter of the thesis. Before addressing this, VAAs will be introduced, not only as the source of data used in this work, but as an imminent integrated part of the election process, and as an aid for finding representation. Or at least an aid in identifying the party that matches the voter's political preferences.

1.3 VAAs and their place in voting behaviour studies

One of the reasons for the success of VAAs over recent years identified by Mair (2002) is the increased number of floating voters who need guidance throughout the electoral process, together with the increased political offer. Contemporary electoral research, which is "increasingly eclectic and opportunistic" (Bartels 2008, p. 29) accommodates VAAs, in an effort of gaining a better understanding of voters' behaviour. In what follows, I will discuss how VAAs fit in within the issue voting approach and how they are an appropriate tool to study issue congruence.

1.3.1 Issue voting and VAAs

Issue competition depicts party competition on the issues which dominate the political agenda (Green-Pedersen 2007). The decline in social-structural voting, mainly class voting (Thomassen 2005) and an increase in electoral volatility (Mair 2002) are two recurring findings of recent voting literature on Western Europe. Issue voting was identified as a replacement for social-structural voting (Mair 2002). Issue competition is characterized by political parties that put an emphasis on certain issues, with the ultimate goal of dominating the electoral competition, on topics such as economic, environment or migration issues. Nevertheless, issue competition does not mean that political parties select a particular issue and put emphasis solely on that issue, at the expense of other issues. Rather, each party aims to bring their most salient issue to the middle of the electoral competition, in the aim of forcing their political opponents to take a stance in regard to those particular issues. Furthermore, the proponents of VAAs

argue that these tools affect political parties, by 'forcing' them to adopt positions on issues previously ignored or even avoided (De Graaf 2010).

Before issue competition, the positional competition dominated the electoral competition. Positional competition implies that parties take different positions alongside a pre-given policy dimension, such as the Left-Right scale dimension, dominated by economic issues (Downs 1957). Positional and issue competition may be closely related, but despite their possible connections, one must treat them separately (Green-Pedersen 2007).

Together with party identification, policy preferences are among the most studied determinants of vote choice (Highton 2011). In order for citizens' policy preferences to influence their vote decision, there is a need for variation in the policy alternatives offered (Campbell 1969). Furthermore, larger policy and ideological divides increase the likelihood that policy preferences are expected to count in determining the vote choice (Highton 2011). In other words, issue voting implies that citizens' vote are determined by the proximity between their own position and the positions of the parties that compete in the electoral contest.

Issue voting requires that voters have well defined policy preferences, that parties offer policy alternatives, but also have the ability to link their position to the position of the parties standing for elections (Garzia 2010). The recommendations provided by VAA tool cover the last part, which is the most difficult for voters. More specifically, the algorithms incorporated in the VAA tool calculates the distance between the issue position of both the user and the parties, providing the link between the two.

During election times, voters are faced with the difficult task of weighting parties' stances on different policy issues in order to reach a decision. The difficulty in decision making is due to the fact that most of the voters are ill-informed about the exact positions of parties on political matters. As a consequence, voters as bounded rational citizens (Simon 1985) rely on information which is offered by mass media through agenda setting (Bartels 1993). VAAs are campaigning tools that eliminate the cost of information, and offer a tailored advice, simulating the context of full information. The growing importance of issue voting (Dalton 1996, Franklin et al. 2009) following Downs's (1957) spatial model, where every

policy can be placed on a Left-Right continuum, is accommodated by VAAs (Cedroni & Garzia 2010).

As stressed above, in order for issue voting to be meaningful, voters need to have clear issue preferences, parties need to compete over the same policy issues (Petrocik & Verba 1979) and voters have to be able to identify their position relative to the position of parties (Butler & Stoke 1974). VAAs help voters to make more informed political decisions. It also lowers the costs of information, by presenting to the voter the parties' position on salient policy positions. This is achieved by comparing the position of the user with the position of the parties, and presenting the user with a rank-order list of parties, following an algorithm and proximity logic (Cedroni & Garzia 2010).

A great part of research on the effects of campaign information on vote choice deals with how the information is received and processed by the voter during electoral campaigns. There are two categories of actors involved: the supply side, including political parties and candidates; and the demand side, representing the voters. Information is generated by the supply side, directly, through political campaigns, party platforms, political programs, and indirectly, for example through mass media and social interactions. Processing this information can help the voter to make an informed vote choice.

VAAs belong to the latter category, generating information through indirect mechanisms. The novelty of VAAs is lays in the type of information they provide, which is tailored made for each VAA user (Alvarez, Levin, Trechsel & Vassil 2014). In summary, VAAs produce a customized portrayal of the political supply, generating information that is easy to process, lowering the costs of information.

1.3.2 The research potential of VAAs

The field of VAA research is dominated by case studies (Cedroni & Garzia 2010). Although offering valuable insights and detailed analyses of specific electoral contexts, the empirical findings of these case studies are limited to the particularities of different national settings.The case studies are also limited by the varying VAA usage patterns and a range of methodological settings. The expansion of VAAs as campaigning tools generated a new area of research, but the growing field

of VAA literature does not benefit from a well structured corpus. Triga et al. (2012) and Marschall & Garzia (2014) identified two major axes around which the VAA literature is clustered, one related to the design of the tool, the second one related to the effects that VAAs have on their users.

The first axis focuses on issues related to the design of VAAs. Among the methodological aspects there are statement selection (Baka et al. 2012, Gemenis 2012, Nuytemans et al. 2010, Walgrave, Nuytemans & Pepermans 2009), methods used for coding the parties (Gemenis 2013, Krouwel et al. 2012, Krouwel & van Elfrinkhof 2014, Trechsel & Mair 2011, Wagner & Ruusuvirta 2009). The design of VAAs also involves further methodological considerations such as the type and scales used in answer categories, calculation methods used (Louwerse & Rosema 2014, Mendez 2012) and the organization of media campaigns (Çarkoğlu et al. 2012).

The second axis concerns the analysis of VAA-generated data, which includes an analysis of the following: profile of VAA users (Hooghe & Teepe 2007, Wall et al. 2009), the effects on information, mobilization and participation of users (Gemenis & Rosema 2014, Marschall & Schmidt 2010), the effects on the process of opinion formation and impact on vote choice (Alvarez, Levin, Trechsel & Vassil 2014, Andreadis et al. 2013, Ladner, Fivaz & Pianzola 2010, Ladner et al. 2012, Pianzola & Ladner 2011, Marschall & Schultze 2012, Ruusuvirta & Rosema 2009, Wall et al. 2014), the ideological profile of the parties or candidates and party mapping (Wagner & Ruusuvirta 2012, Wheatley 2012) and the logic of electoral competition (Ramonaite 2010).

More recently, the proliferation of these campaigning tools led scholars towards a new approach VAA research, focusing on their potential as data sources (Garzia & Marschall 2016), which entails a third stream of research. This stream of work follows a twofold categorization, with studies focusing on political parties, more generally, and other studies focusing on political representation. The first category includes literature which focuses on identifying political dimensions in various party systems (Wheatley 2012, Burean & Popp 2015). The second category includes studies that use VAA generated data to look at representation, starting with Alvarez, Levin, Trechsel & Vassil's (2014) 'representative deficit'.

This thesis fits into the second category and complements recent work of Alvarez, Levin, Trechsel & Vassil (2014), Garzia et al. (2014), Bright et al. (2014) on political representation. In the next section I will present the concept of representative deficit, followed by a brief introduction to the measures of *absolute citizen* and *relative congruence* that forms the subject of this research.

1.3.3 The representative deficit as a measure of issue congruence

Employing data collected through EU Profiler, the first pan-European VAA, developed for the 2009 elections to the European Parliament, Alvarez, Levin, Trechsel & Vassil (2014) introduced the concept of "representative deficit". Alvarez, Levin, Trechsel & Vassil (2014) assess representative deficit as the difference between the user's issue position and the highest VAA-ranked party, on a 100 point scale (lower the deficit, higher the representation).

The representative deficit captures the part of a user's political preferences which are not reflected by any party in the electoral contest. It can also be interpreted as a measure of satisfaction with the political system and its offerings.

The concept of representative deficit gained momentum in the VAA field (Alvarez, Levin, Mair & Trechsel 2014, Bright et al. 2014, Dinas et al. 2014, Garzia et al. 2014). Garzia et al. (2014, p. 32) point out that the representative deficit theory "does not only help to explain the switching of party preferences after exposure to VAAs, but can also account for changing patterns of mobilization at the individual level". Therefore, representative deficit can help answer some important questions about the political behavior of VAA users. The main advantage of the measure of representative deficit is the overview on the quality of representation it provides, as the overlap between the demand and supply side of the electoral market (Alvarez, Levin, Mair & Trechsel 2014).

The studies mentioned above make use of the concept of representative deficit in different ways, namely as an overview on the quality of representation, or as a predictor of the effects VAA tools have on their users. The concept of representative deficit is by all means, a measure of congruence, or more precisely of incongruence.

Alvarez, Levin, Trechsel & Vassil (2014) tested whether the effect of VAAs on

users' behaviour is dependent on representative deficit. More specifically, they hypothesize that in a two-party system, the probability for an overlap between the propensity-to-vote (PTV) and the VAA output is higher. In a multi-party system, it is posited that the probability of a mismatch between the PTV and the VAA output increases. Their results suggest that there is a strong relationship between the number of parties and the probability of a congruent outcome. The logic applied is a numeric one; a small number of parties create higher probabilities that the PTV will match the VAA advice.

Contrary to Alvarez, Levin, Trechsel & Vassil (2014), I argue that what matters is the number of viable options the user possessed to match her preferences with. A higher number of options would ensure that voters find a party that best represents their political preferences.

In order to introduce the concept of congruence measured with the help of VAA generated data, this section offered an introduction to VAA tools and their users. The concept of representative deficit was a starting point in developing the measures of congruence used in this work, but the approach I take is rather different, as it will be explained in the next section.

1.3.4 Issue congruence assessed with the help of VAA data

The present study is accommodated by the third and newest stream of VAA research, that treats VAAs as data sources. In what follows, I will briefly present the measures of *absolute citizen* and *relative congruence*, which is the focus of this thesis.

VAA data is the perfect data source for the study of political representation. It is the only data source that assesses the political preferences of parties and citizens on the same scale. As (Achen 1977) stated, the most important challenge faced by congruence studies is the need to estimate the positions of citizens and those of the representatives on the same scale. Bingham Powell Jr (2009) takes this argument further, stressing the magnitude of the problem in cross-national analyses of ideological congruence. The criticisms raised by both Achen (1977) and Bingham Powell Jr (2009) do not represent a problem for the current study, as the positions of VAA users and parties are assessed on the same scale

and issue policies are similar across countries (28 for the 2009 EU Profiler and 22 for the 2014 EUvox). Even if different translations could lead to slightly different meanings of the policy statements, congruence is assessed as a distance measure, which addresses the potential problem of different meanings across different contexts.

Congruence is assessed as the degree of matching of the political preferences of citizens and the party they intend to vote for. The recent debate in the representation studies in relation to measurement, stand behind the decision to create both an *absolute citizen* and a *relative* measure of congruence. The recent studies of Golder & Stramski (2010) and Blais & Bodet (2006) argue that longstanding findings in the representation studies are due to methodological decisions on measurement, and not all of these results hold when tested using new measures of congruence.

The measure of *absolute citizen congruence* assesses congruence as the degree of matching between a voter and the party she intends to vote for. The measure is assessed at individual level, on a series of 28 and 22 policy statements, common across European countries. Party and country congruence scores are obtained by averaging over individual scores.

Relative congruence is measured based on the same principle, but takes into account the distribution of scores for the whole base of party supporters. This measure is assessed at the party level, then at the country level by averaging party scores. A more detailed explanation on the measures of congruence is to be found in the chapter on research design.

This chapter introduced the study that I will carry out in this thesis, its place within the literature, and emphasized the scholarly debates that it tries to address, together with the contribution it makes to the representation studies. During the chapter, I highlighted the choice for issue congruence over ideological congruence, together with the methodological considerations that contributed to this decision. Voting Advice Applications were briefly introduced, as providing a means to study issue congruence.

1.4 Voting Advice Applications

1.4.1 What are Voting Advice Applications?

In the previous section I explained how VAA data can be used to tackle questions about political representation, and more precisely, issue congruence. In this section, I will provide a very brief outline on the development of VAAs. The section starts with a description of VAAs and their users, followed by a discussion about the role VAAs have as election tools, explaining how their role may differ across countries and electoral systems.

Alongside with the development of the Internet, new communication and participation tools have arisen. VAAs emerged in Western European democracies and changed the patterns of political participation. VAAs appeared as paper-and-pencil tests for first time voters, in the late 1980s (Ruusuvirta 2010, Gemenis & Rosema 2014), but the online revolution boosted their usage, making them available worldwide. In the last decade, millions of users accessed VAA sites during elections. Initially implemented in the Netherlands, then Switzerland and Germany, VAAs have taken Europe by storm. Nowadays, there is hardly a European country without a VAA (exceptions are Malta and Slovenia (Garzia & Marschall 2012). Their increased popularity transcended to European level, in second-order elections, with the EU Profiler in 2009, euandi and EUvox in 2014 in the elections to the European parliament.

According to Walgrave et al. (2008), in 2007 there was at least one VAA in 15 countries out of the 22 they surveyed. In some countries, the number of VAA users reached millions, with 4.7 million advice given by the Dutch StemWijzer in 2006, and 6.7 million advices given by the German Wahl-O-Mat in 2009, accounting for approximately 40 percent of the voting age population in the Dutch case and 12 percent in the German one (Garzia 2010). Another successful VAA example is represented by the Swiss *smartvote*, launched as an alternative to Politarena, offering almost one million advices in 2007. Finland is another example of the expansion of VAAs (Marschall & Garzia 2014). In 2007, 20 VAAs were available to Finish voters, with the most popular one giving over a million advices (Ruusuvirta 2010). In light of these developments, almost all European countries have VAA experience (Garzia & Marschall 2012). The VAA

success transcended across the European borders, with election tools in the USA, Egypt, Morocco or Iran, to mention just a few.

The increased popularity of VAAs is associated with the increasing number of floating voters (Dalton et al. 2000, Mair 2002) as they need guidance throughout the electoral process. The Netherlands is the best example of the transformation from a 'pillarized society' (Lijphart 1968) to a volatile democracy (Mair 2002, Van der Meer & Dekker 2011), which fostered the use of VAAs. In an electoral system where the voting options available are increasing, the vote decision becomes more difficult. It is in these systems where VAAs thrive.

1.4.2 Who are the VAA users?

The proliferation of the Internet led to significant changes in patterns of political participation, making some political activities more readily available. Aided by the Internet, political engagement and some forms of political participation have known an increase (Norris 2000). This is true particularly for the younger generation, who very regularly use the Internet. As mentioned above, high usage of VAAs prompted many researchers to turn their attention towards these tools, discovering the potential the VAA data holds. Naturally, much of VAA research deals with the users and the characteristics they bear. The typical VAA user tends to to be young, male, highly interested in politics and highly educated (Marschall & Garzia 2014). Furthermore, there is evidence to suggest that VAA users are better informed, therefore more likely to vote in elections, compared to non-users Schultze (2014).

It comes at no surprise that VAA users are not representative of the electorate at large. The bias in VAA data is explored in the sixth chapter of this thesis. VAA scholars have devoted a lot of time and energy into adjusting the VAA sample in order to resemble a nationally representative one (Andreadis 2014), but up to date, there is no clear solution. Table 1 shows a crude comparison of demographic information, comparing the 2009 EU Profiler with the 2009 European Voter Study (part of the European Election Study). The latter contains representative samples of voters from EU countries.

While part of the scholarship on electoral behavior continued the race after causal

Table 1: 2009 EU Profiler - 2009 European Voter Study

	2009 EUP	2009 EES
Age 18-29 (%)	21.82	13.78
Male (%)	69.70	44.12
Higher education (%)	68.42	29.22

modeling initiated during the 1960s and 1970s (Page & Jones 1979), others chose to change the subject. This lead to contemporary electoral research that is "increasingly eclectic and opportunistic" (Bartels 2008, p. 29). It is this eclectic and opportunistic field of research that accommodates VAAs, as campaigning tools, as a way of helping voters make informed political choices, and to gain a better understanding of contemporary electoral behavior. The success of VAAs in certain countries raises questions about the conditions they need thrive; section A of the Appendices contains a discussion of the factors that potentially contribute to the success of VAAs, starting with Internet usage, the role of mass media, social capital and the features of the electoral system, as well as factors strictly related to the the design of the tool. More than offering an explanation for the success of VAAs, the discussion aims to give an understanding of the sources of bias inherent in VAA data. This chapter introduced the research questions that will be tackled in the thesis. I situated this research in congruence studies, emphasizing the approach I will follow, and brought arguments for the conceptualization of congruence as a *many-to-one approach*, following the work of Golder & Stramski (2007). A substantial part of this chapter was dedicated to VAAs, as data source.

The next chapter will present the theoretical underpinnings of this thesis, starting with the importance of studying political representation and the role of issue congruence within representation studies. I will then highlight the advantages of assessing congruence on issue dimensions, following Dalton (1985, 2017*b*). The last three sections of the chapter will focus on electoral system, party and individual level predictors of issue congruence.

2 A theoretical approach to the study of issue congruence

2.1 Introduction

This chapter starts by emphasizing the importance of studying issue congruence and places this research in the field of representation studies. I will discuss the relevance of studying issue congruence in a time when new issues regularly appear on the political agenda. New issues, societal changes and the structure of party competition is in a continuous change, coupled with new parties attempting to gain popular support. Next, the importance of studying congruence where it is formed, namely at individual level, will be discussed. The vast majority of representation studies focus on electoral design setting and party characteristics, ignoring the individual level, which may be the most important. One can argue that all the decisions about party choice start at the individual level, and the argument in its purest form is that ultimately, the voter matches her preferences with the policy stances of political parties.

The first section answers the question of why are we studying political representation, laying down the motivation behind this thesis. The section is structured into four subsections. In the first subsection, I will present the main approaches to the study of political representation, dealing with citizens' votes versus citizens' preferences approaches and dyadic versus collective representation. The next subsection is centered around the main approaches to the study of issue congruence, introducing issue competition and issue voting, followed by a subsection on issue domains. In the last part of this section, I review the current challenges to representation studies, focusing on the issues that form the subject of this research. The second, third and forth sections of this chapter introduce the structure of the empirical chapters of the thesis.

The second section of this chapter focuses on institutional designs and their influence on issue congruence. Some of the most studied predictors of congruence at the level of electoral system are district magnitude, proportionality and polarization. Attempting to solve the puzzle of representation at an even lower level, the next section focuses on party characteristics, such as the type of party, niche

or mainstream and on its governmental status. In the light of the recent findings in congruence studies, the last section looks at individual level predictors of congruence, such as interest in politics and education.

2.2 Why do we study political representation?

Sartori (1976) argued that parties are channels of expression and their most important role is the representation of citizens' demands. State of the art research suggests that political representation is the ultimate goal in the relationship between citizens and their representatives (Sartori 1976, Dalton et al. 2000). Accordingly, assessing representation creates an important overview on the state of democracy in a country; for example, a higher degree of representation between citizens and their representatives would ensure that their policy preferences are better represented, leading to higher levels of satisfaction with democracy. Therefore, it is important to have a clear notion of political representation, accounting for different institutional designs, encompassing features of the electoral and party system, as well as those of political parties and individual level characteristics. Ultimately, we look at political representation as a quality assessment of how well a democracy functions.

Besides the long academic tradition of studying representation, the latest societal changes require a closer inspection of the relationship between citizens and representatives. Congruence research has taught us that the most important factor in a vote decision is party identification (Inglehart & Klingemann 1976). However, the societal changes previously mentioned have brought new issues onto the political agenda. Cultural issues such as immigration have been brought to the forefront of political competition, becoming valence issues (Dalton 2013). These rapid changes forced parties to take ownership of these issues, in their quest to keep their supporters and to attract new ones. The rise of new issues has been accompanied by an increase in electoral volatility, as observed by Dalton et al. (2000). Simply put, we need to know if and how these changes are affecting the strength of the relationship between citizens and their representatives. Looking at congruence between citizens and the parties they vote for on the unidimensional Left-Right scale, studies have consistently found high levels of agreement, as identified by Huber & Powell (1994), Rohrschneider & Whitefield

(2012), Budge (2012) and others.

As Dalton (1985, 2017*b*) argues, European elections provide the context for studying how people vote in second-order elections, and the role EU issues have in the process leading to vote choice, as well as support for the EU. But similarly to Dalton (2017*b*) European elections are treated here as 'an event when a large number of nations simultaneously hold elections in which voters think about their policy priorities and make a party choice'. For the purposes of this study, the problem of second order elections (Schmitt & Thomassen 1999) is not a problem *per se*. Clark & Rohrschneider (2009) has shown that the choices voters make in second order elections are mostly based on the national context, rather than on the European one. In other words, the voters weight in the parties on their national politics, rather than on their stances on EU issues (Clark & Rohrschneider 2009). The data generated by VAA tools developed for the election to the European Parliament, EU Profiler and EUvox, fulfill the role outlined by Dalton (2017*b*) and provide the framework for a cross-country comparison.

In a meta-analysis of representation studies, Powell Jr (2004) showed that although single case studies were the norm in the study of the linkage between citizens and representatives, the 2000s have seen an explosion in cross-national analyses. By adopting a comparative perspective, these studies were forced to deal with methodological challenges related to measurement and specification (Powell Jr 2004).

Scholars of electoral democracy argue that while in plurality/majoritarian systems the representation of majority is enhanced, in proportional representation systems (PR), groups whose policy preferences are neglected in plurality/majority systems (eg. minorities, women) gain representation. As a result, PR systems produce better representation. This represents a reductionist view of the relationship between electoral systems and political representation, but is one of the pillars of a longstanding scholarly debate on the effects of institutional designs.

Because political parties are the central element of a political system, there is a long tradition of examining the role of political parties in representation studies. Party features such as elite/mass party, ideology (Dalton 1985) and governing

experience (Rose & Mackie 1983, Janda 1980) have been studied in relation to congruence. But as the patterns of political competition changed, there are new features of political parties that have scholars turned their attention to, such as the niche/mass party dichotomy (Belchior 2013, Ezrow 2010).

As Walgrave & Lefevere (2013) point out, research on congruence has systematically overlooked the features of individual voters. Most studies focus on a single level, party or system level. In studying congruence, one should start with the voter, because it is the voter who matches her preferences with those of the parties. This thesis supports the argument put forward by Walgrave & Lefevere (2013) and Steenbergen et al. (2007), that more attention should be paid to the features of individuals.

In a nutshell, we study representation because it lays at the foundation of democracy. The concept of representation has the political parties and voters at its heart, where voters are trying to match their preferences with those of the parties. However, there are questions that remain unanswered. This research tries to tackle some of these questions, as briefly outlined in the introductory chapter.

Although representation studies have a long research tradition, recent societal and political developments raise new questions about the linkage between citizens and their representatives. Besides the substantive questions related to the strength of this linkage within certain institutional designs (Blais & Bodet 2006), there are also methodological questions brought up by recent scholarly debates, such as the issue of measurement, which have serious implications for comparative studies (Golder & Stramski 2010).

Looking at issues and issue dimensions offers a new perspective and a better understanding about how the democratic process functions. The need to study issues and issue dimensions is given by the new cultural issues, such as immigration and gender issues, that appeared on the political agenda over the last years. The next section presents a summary of the main approaches and findings in the representation studies.

2.2.1 Main approaches to the study of political representation

The vast literature on political representation encompasses different ways of assessing the match between voters and representatives. On one side there are the studies where representation is seen as an input, such as that of vote-seat proportionality. On the other hand are the studies which focus on clarity of responsibility, accountability, policy responsiveness, whereby representation is seen as an output. This thesis focuses on the former category, dealing with congruence as a way of grasping political representation. It looks at the issue preferences of citizens and those of the parties. In what follows, I will present the foundations of representation studies.

The seminal work of Miller & Stokes (1963) introduced the study of MP-voter congruence, which was further used in studies of democratic representation. One important aspect of their work that was highly emphasized in the representation studies that followed was the idea that the empirical implementation of straightforward MP-voter congruence is impossible (Thomassen & Schmitt 1999). Furthermore, the implementation of congruence as a sole means of measuring democratic representation is incorrect, because democratic representation encompasses more than a match between the policy preferences of voters and representatives (Thomassen 1994). In a nutshell, MP-voter congruence should not be interpreted "as evidence of a normatively superior expression of democratic representation, but rather as a means of looking at representation" (Belchior 2013, p.354), a view that is strongly supported in this thesis.

Citizens' votes vs citizens' preferences

As briefly stated above, the study of the connections between citizens and their representatives can be split into two traditions. In the first approach, studies of vote-seat representation, follow the tradition of Rae (1967) and look at how election laws, the geographic distribution of votes or the number of parties impact representation. The second approach, in the tradition of Miller & Stokes (1963) looks at the relationship between citizens' issue preferences and the preferences of their representatives. It is also called substantive representation, because it focuses on the citizens' preferences rather then their votes.

The first approach deals with citizen preferences by assuming that 'all we need to

know about those partisan preferences is the partisan votes that citizens cast in competitive elections' (Powell Jr 2004, p.275). As Powell Jr (2004) emphasizes, one of the problems of this approach is related to the meaning of 'political party'. More precisely, with the assumption that the same party has the same meaning to citizens from different districts within a country. Furthermore, this approach does not differentiate between parties in any other way but on the basis of votes received.

The studies in the tradition of Miller & Stokes (1963) teach us that the political preferences of citizens translate into policies through the process of selecting representatives. This translation process is far from simple; in fact, the process is dependent on institutions and parties. The responsible party model is the most used theoretical framework in studies of political representation (Miller & Stokes 1963, Dalton 1985, Converse & Pierce 1986, Miller 1999, Belchior 2013). According to this model, parties are instruments of representation. The voters base their electoral decision on parties' policy stances, at the same time rewarding the incumbents based on their performance. Therefore, citizens indirectly control the parties, while parties have to offer distinct policy positions and to fulfill their pledges (Belchior 2013). The model is built on the strong assumption that parties have a coherent policy position and that citizens have clearly defined political preferences (Mair 2002, Schmitt & Thomassen 1999, Arnold & Franklin 2012).

Responsible party model

The ideal voter would base her vote decision after a careful weighting of the parties' political stances, followed by the matching with her own political preferences. In this ideal situation, the voter is fully informed; in the real word, the cost of gathering information is too high, compared to the utility of the vote (Downs 1957). Accordingly, the voter has to determine her political decision based on the available information on political parties. The responsible party model is based on the idea that parties offer clear policies to voters, that voters vote on these policies and parties responsibly, once elected, act on these promises. This work follows the responsible party model approach, because it focuses on the political preferences of the voters that are reflected in the policy positions of parties, rather than on policy representation and public responsiveness, seen as an outcome of the democratic process in the work built around the dynamic

representation approach.

Dyadic versus collective

While Miller & Stokes (1963) looked at dyadic representation, the comparative studies focusing on European democracies moved to a collective measure. The combination of multi-member districts and cohesive party behavior Barnes (1977) noticed in Italy, led subsequent scholars to focus on 'a collective legislative party as the appropriate agent of party voters, who are its principals' (Powell Jr 2004, p.284).

In an analysis of data from the 1979 elections to the European Parliament, Dalton (1985) studied the degree to which the candidates were representative of their voters. The study provides multiple measures of issue representation, focusing on four issue domains (economic issues, foreign aid, security issues and new politics). The results show that while in some cases there was close correspondence between party elites and voters, on issue domains such as economic and security issues, in other cases, such as new politics issues, this correspondence was weaker. Dalton (1985) provides a great example of using multiple measures of issue congruence, focusing on collective correspondence between voters and candidates. Last but not least, it provides a comparative account on representation, which inspired subsequent research, such as the present one. Building on his previous work, Dalton (2017*b*) tested the relationship between voters and parties, focusing on voter-party issue agreement in the context of 2009 European Elections, finding that the linkage between voters and parties is stronger on socio-economic issues, but weaker on newer issues, such as immigration and gender issues. In a similar manner, I am looking at the preferences of voters, not at their votes.

2.2.2 Main approaches to the study of issue congruence: from positional to issue competition

Prior to issue competition, elections were dominated by positional competition. Positional competition implies that parties take different positions alongside a pre-given policy dimension, as the Left-Right scale dimension, dominated by economic issues (Downs 1957). The positional and issue competition may be closely related, but regardless of these possible connections, they need to be

treated separately (Green-Pedersen 2007).

Issue competition describes party competition whereby issues dominate the political agenda (Green-Pedersen 2007). The decline in social-structural voting, class voting in particular (Thomassen 2005) and the increase in electoral volatility (Mair 2002) are two main consistent findings in recent voting literature on Western Europe. Issue voting was identified as a replacement for the social-structural voting. Issue competition is characterized by political parties that put emphasis on issues they would like to dominate in electoral competitions, such as economic, environmental or migration policy. Nevertheless, issue competition does not mean that political parties will select a particular issue and put emphasis on that issue only, ignoring the rest. Rather, each party aims to bring 'their' issue in the middle of the electoral competition, in order to force their political opponents to take a stance. Furthermore, the proponents of VAAs argue that these tools 'force' political parties to adopt positions on issues previously ignored or even avoided (De Graaf 2010), therefore enhancing issue competition.

Together with party identification, policy preferences are among the most studied determinants of vote choice (Highton 2011). In order for citizens' policy preferences to influence their vote decision, there is need for variation between the policy alternatives (Campbell 1969). Furthermore, the larger the policy divide and ideological divide, the more the policy preferences are expected to count in determining the vote choice (Highton 2011). In other words, issue voting implies that citizens' votes are determined based on the proximity between their own position on an ideological continuum and the positions of the parties that compete in the electoral contest. Issue voting requires that voters have well defined policy preferences, that parties offer policy alternatives and voters own the means to link their position to the position of parties standing for election (Garzia 2010). The recommendations provided by the VAA tool addresses the link between the preferences of voters and parties, which represents the most difficult task for the voter. More specifically, it calculates the distance between her positions on issues and parties' positions.

During elections, voters are faced with the difficult task of weighting parties' stances on different policy issues, in order to reach a decision. The difficulty of decision making is greatly influenced by the fact that most of the voters are

ill-informed about the exact positions of parties on political matters. As a consequence, voters as bounded rational citizens (Simon 1985) rely on information which is offered by mass media through agenda setting (Bartels 1993). From this perspective, VAAs are campaigning tools that eliminate the cost of information, offering a tailored advice, simulating the context of full information. To conclude, the growing importance of issue voting (Dalton 1996, Franklin et al. 2009) following Downs's (1957) spatial model, where every policy can be placed on a Left-Right continuum is accommodated by VAAs (Cedroni & Garzia 2010). As mentioned above, in order for issue voting to be meaningful, voters need to have clear issue preferences, parties have to compete over the same policy issues (Petrocik & Verba 1979) and voters need to be able to identify their position relative to the position of parties running for election (Butler & Stoke 1974). VAAs help voters to make more informed political decisions and lowers the costs of information, by presenting to the voter the parties' position on salient policy positions. This works by using an algorithm to compare the position of the user with the position of the parties, and presenting the user with a rank-order list of parties using a proximity logic (Cedroni & Garzia 2010).

2.2.3 Issue dimensions

In an early study of citizen-party elite dyads in Western democracies, Dalton (1985) argues that while in some cases there is close correspondence between citizens and parties, in the other instances these linkages are weaker. For example, while citizens and party elites seem to be in stronger agreement on economic and security issues, the relationship weakens when it comes to issues such as foreign policy. Dalton's (1985) analysis was based on data from the first elections to the European Parliament, in 1979. Testing the same hypotheses over three decades later, Dalton (2017*b*) found that while the linkage between citizens and representatives is strong on economic issues, the strength of the linkage decreases significantly for cultural issues, such as immigration and gender issues.

The relevance of issue domains such as the EU is highlighted in research showing that as a party leans to towards the ideological extremes, Left or Right, the less likely it is to favour European integration Hooghe et al. (2002). Furthermore, it has been showed that incumbent parties are more likely to be in favour of

European integration (Arnold & Franklin 2012). One of the contributions this thesis makes, highlighted in the introductory chapter, is the focus on issue areas. Being able to look at issue areas, we are able to answer specific questions, that go beyond a general understanding of congruence between citizens and the parties they vote for.

Most representation studies centered on policy issues make use of a limited number of policies. For example, Holmberg (2000) uses 13 issues in 5 Nordic countries and Walgrave & Lefevere (2013) use 50 policy statements, but they focus solely on Belgium. The unique opportunity presented by VAA generated data allows one to look at the correspondence between citizens and parties on a series of issue policies, usually 30, covering a wide range of issues. The issue statements included in the 2009 EU Profiler and 2014 EUvox tools can be split among three categories, *Economy, Social* and *EU*. Rather than focusing on a single measure of congruence, which brings all issues together, the data presents the possibility of looking at congruence on issue domains. By focusing on issue areas rather than on a single measure of congruence, this research builds on previous work conducted by Dalton (1985, 2017*b*).

Furthermore, previous work has found differences in congruence levels across different issue areas (Dalton 1985, 2017*b*). With one notable exception (Walgrave & Lefevere 2013), there are no studies on the source of these differences. This gap in the literature will be addressed in chapters four to six. Finally, as Rovny & Edwards (2012) observe, politics is fundamentally a struggle over dimensional issue competition. Furthermore, the increasing use of 'political space' over 'political dimension' adds weight to the notion that the ideological Left-Right does not capture the variation in the range of issues displayed on the political agenda.

2.2.4 State of the art and new challenges in congruence studies

The scholarly consensus on the advantage presented by PR systems over plurality systems has been recently challenged by two empirical studies (Blais & Bodet 2006, Golder & Stramski 2007). Making use of the cross sectional data called the Comparative Studies of Electoral Systems (CSES), they argue that their measure of congruence is superior. Their study shows that PR systems do not hold a consistent advantage in promoting congruence between citizens and representatives.

Bingham Powell Jr (2009) delved into this inconsistency, with a similar result. The findings proved to be robust when tested against different datasets, using slightly different approaches for measuring ideological congruence. Furthermore, Bingham Powell Jr (2009) argues that the association between election rules and congruence has declined over the past years (1996-2004) due to the tendency of parties in plurality systems to converge towards the median voter. What matters most is the polarization of the party system. Also, while the average levels of ideological congruence are roughly constant in PR systems, they vary over time in plurality systems (Bingham Powell Jr 2009). In line with Blais & Bodet (2006), Golder & Stramski (2007), Bingham Powell Jr (2009), Louwerse (2012) found no differences in terms of issue congruence when looking at party mandate fulfillment between Great Britain, a majoritarian system and The Netherlands, a consensus democracy. In the light of these recent findings, this thesis addresses the relationship between institutional designs and congruence, employing recent election data from 2009 and 2014, in the context of elections to the European Parliament.

There are three different approaches used in cross-national congruence studies: the citizen survey/expert survey approach, the party vote/party manifesto approach and the citizen identification/citizen perception approach. The last approach was employed by Blais & Bodet (2006) and Golder & Stramski (2007) and led them to doubt the advantage PR holds over majoritarian systems. Challenging the results of Blais & Bodet (2006) and Golder & Stramski (2007), Bingham Powell Jr (2009) tested the model using all three measuring approaches. While the results proved to be robust, Bingham Powell Jr (2009) argues that although it is possible to identify strong and weak points of both types of electoral systems, there is no unified theory that would help predict congruence across different electoral systems. The use of a range of measurement approaches allows researchers to delve into particularities of electoral systems and the effects they may have on congruence, as the position of the median legislative party, of the largest plurality party and of the median voter (Bingham Powell Jr 2009). As mentioned above, these studies use ideological congruence. The different approaches to the study of congruence is discussed in chapter three; but for the time being, it is important to stress that although this work focuses on issue congruence, the

underlying principles and approaches are the same.

This section served as an introduction for the three main sections to follow, that will focus on country, party and individual predictors of issue congruence. It laid out the reasoning behind using issue congruence and issue domains. It also highlighted the recent debate over one of the longstanding findings in representation studies and the advantage held by proportional representations systems over majoriatarian ones, based on methodological considerations.

2.3 On the role of institutional designs on congruence

The research question put forward in this section deals with the way in which institutional designs affect political representation. The concept of institutional designs refers to the characteristics of electoral systems and of party systems. Although an electoral system greatly influences the shape of a party system, the party system also influences the evolution of the electoral system, based on the assumption that parties are unlikely to support changes that could affect them negatively. Given these considerations, it is difficult to treat their effect separately. Therefore, characteristics of both electoral and party systems are used to explore the effects on political representation.

Although the data used in this research was collected during the 2009 and 2014 elections to the European Parliament, these thesis focuses on the structure of national electoral systems. The electoral setting for elections to the European Parliament (EP) follow proportional representation rules, which are homogeneous, with the exception of Ireland and Malta (Farrell & Scully 2007, Dalton 2017*b*). Due to this homogeneity, the effects of PR versus majoritarian systems cannot be examined in EP elections. Instead, I rely on the features of the national electoral systems.

Traditionally, some features of PR systems are seen as advantageous. First of all, proportional systems are associated with a larger number of political parties, which creates a richer political offer. Additionally, PR systems make it easier for new and small parties to emerge. The wider the political offer is, a greater number of political issues covered, that can lead to an improved mirroring of the political offer in the political preferences of the electorate. Popular wisdom

suggests that PR systems experience higher levels of turnout due to a higher number of parties under PR rules and a richer selection of electoral choices (Karp & Banducci 1999).

This thesis builds on the stream of literature which argues that PR systems are associated with a larger number of political parties which create a richer offer in terms of political issues. I therefore argue that the more diverse the electoral options are, higher the chances the user will find a party who will match her preferences, hence contributing to higher congruence. Therefore, in a multi-party system, the average degree of congruence should be higher than in an electoral system with a small number of parties. This follows the standard hypothesis in representation studies, that holds PR systems as having a representational advantage over majoritarian systems (Dalton 1985, 2017*b*).

Under the single-member district rule, the winning candidate is the one who receives the majority of votes. Plurality systems, also named disproportional systems, employing the "first-past-the-post" and "winner-takes-it-all" formula often create single-party majorities in the lower houses of parliaments.[3] The plurality systems create a disproportionate allocations of votes to seats in the legislature. Furthermore, these systems tend to reward larger parties and hurt smaller ones. On the other hand, the proportional representation systems create a proportional allocation of votes to seats, which translates into multi-party coalitions within the legislature.

PR systems are prevalent in more developed democracies, and one of the reasons may be that "they are more appealing in terms of their "representativeness" than plurality systems" (Ezrow 2010, p.8). More precisely, the interests of minorities are more likely to get represented in the legislature, depending on their level of support in the electorate. The critics of the PR systems argue that the mechanism that is at work in these kind of systems allow too many political parties to gain power, which compromises the efficiency and stability of the electoral system (Farrell 2011).

The varying thresholds used in different electoral systems also affect the number

[3]Examples of countries under plurality voting rule are New Zealand before 1993, Great Britain, Canada and the United States.

of parties; in countries with higher thresholds, small parties are disadvantaged. It also encourages strategic voting, because citizens are motivated to cast their vote for a party with real chances. Alongside the increased levels of satisfaction with democracy, electoral turnout is higher in PR systems, compared to plurality systems (Lijphart 1999*a*).

Studies on vote-seat representation portray PR systems as holding a representational advantage over majoritarian ones, empirical studies on ideological congruence show a similar pattern of findings. PR systems are shown to posses a better fit between voters, median legislators and governments on the Left-Right dimension (Huber & Powell 1994, Klingemann et al. 2006, Powell 2000, 2006). Belchior's (2013) work on party congruence across European party systems tests three theoretical models, exploring causality at an individual level, at meso[4], and macro[5] level. She uses three explanatory models, which provide the most important contributions to the existing literature. This is the Downs-May, the Przeworski-Sprague and the Huber-Powell-Wessels model. Reviewing the literature on representation, she argues that most of the research focuses on theoretical matters or it is largely descriptive.

Building on the work of Dalton (1985), Huber & Powell (1994) and Wessels (1999), Belchior (2013) argues that despite some controversy, there is a general trend in the literature which supports the idea that PR systems are more likely to generate high levels of political representation, compared to majoritarian systems. According to the Huber-Powell-Wessels model, representation increases especially in large constituencies, when the party systems are polarized and possess a large number of parties. These characteristics provide the voter with multiple alternatives, and increases her chances of finding a party with similar political stances, therefore exhibiting higher levels of congruence (Belchior 2013). Tested against data from the 2009 elections to the European parliament in the PIREDEU project, the results indicate that system level characteristics, such as the proportionality of the electoral system and the level of fractionalization does not determine congruence between voters and members of parliament. The results of the study emphasize the relevance of political parties' characteristics

[4]Party level

[5]System level

and their electoral strategies, indicating that larger centrist parties present the lowest levels of Left-Right congruence between members of parliament and voters. Belchior's (2013) study also suggests that the electorate is situated at the centre of the ideological spectrum, while parties take more extreme positions, especially extreme right wing parties.

Studies looking at the effects of electoral system design on political representation treat PR and majoritarian systems separately. The universe of cases that make the subject of this research is within the boundaries of the European Union. Given that the number of plurality systems is too low, I will not differentiate between countries based on the PR/majoritarian divide. The differences between the two are encompassed by the district magnitude (which will be 1 in plurality systems) and by the disproportionality of the system. As Golder & Stramski (2010) suggest, measuring electoral systems along a disproportionality continuum avoids this problem.

In a nutshell, scholars of comparative democracy often argue that electoral systems are the principal factor in explaining cross-country differences in patterns of political representation (Farrell 2011, Katz 1997, Arend 1994, Rae 1967, Taagepera & Shugart 1989). The divide is drawn between systems allocating seats in legislature (plurality voting) and via proportional representation electoral formulae. The differences between the electoral systems are attributed to the following four characteristics: the number of parties, disproportionality, district magnitude and polarization.

EFNP or party fractionalization

One of the most examined characteristics of a party system is the counting amount of parties. A significant number of representation studies deal with the merits of a two party versus a multi-party system, focusing on the relationship between the number of parties and representation, social cleavages, electoral turnout and different aspects of electoral behaviour (Dalton 2008). There are two different methods to count political parties, and neither looks at the absolute number. Both give weight according to the size of the parties. The first one is the Herfindahl-Hirschman index, which is an index of industrial concentration,

calculated as follows

$$Herhindahl - Hirschman = \sum (party\ seat\ share\ in\ legislature_i)^2,$$

ranging from 0 to 1, and where i represents individual parties. The index, developed in the US context, is widely used in economics, as a measure of industrial and market concentration. It employs measures of dispersion, the mean and the standard deviation. Inspired from the Herhindahl-Hirschman, Rae (1967) introduced his index of party fractionalization, as

$$F = 1 - Herhindahl - Hirschmanindex$$

He pointed out that the Herhindahl-Hirschman index is also a probability measure, illustrating the frequency with which a pair of voters would agree to vote for the same party. Accordingly, Rae's (1967) measure represents the frequency with which the voters would disagree over their party choice, in a electorate with randomly paired voters.

Alternatively, and the most widely used measure in comparative research on party systems, is the measure developed by Laakso & Taagepera (1979), which is the inverse of the Herfindahl-Hirschman index. It counts the number of the parties weighted by the size, to account for the reduced relevance of the small parties. The main advantage it holds over the previous indexes is that it can be interpreted as 'the number of equal-sized parties to which the unequal-sized parties is equivalent' (Golosov 2009). Taagepera (2002) emphasizes how the index he developed has a more straightforward interpretation, as a value of 3.2 gives the image of a party system with approximately 3 parties, while the corresponding Herhindahl-Hirschman index = 0.31 and Rae's F index = 0.69 offers a less clear perspective, by comparison (Taagepera & Shugart (1989) in Golosov (2009)). Although easier to interpret, the Laakso and Taagepera index is not a probability measure, but this caveat has not prevented researchers to use it over the Herhindahl-Hirschman or F indexes.

As briefly explained above, Laakso and Taagepera's index weights the parties acoording to their own size, giving larger weights to larger parties. THis therefore makes it possible to discount the small parties. The Herhindahl-Hirschman and Laakso and Taagepera indexes are used interchangeably. As Dalton (2008) shows,

for the 62 elections included in the CSES database, the two scores are highly correlated, at $r = .92$.

Prior studies imply that having more party choices translates into higher levels of citizen satisfaction, as the number of channels through which citizens can express their political preferences increases. Therefore, I hypothesize that *countries with a more fragmented electoral system present higher levels of congruencee (H1).*

Disproportionality

From the 1990 onwards, studies on vote-seat representation, focusing on established democracies (Arend 1994) have shown that PR, multi-member district election rules hold a substantial representational advantage over the various forms of single member district election rules (Bingham Powell Jr 2009). Reiterating a point made in the beginning of this section, based on a rational choice understanding, electoral systems influence the shape of party systems in consolidated democracies.

According to Duverger's law, single-member plurality elections tend to constrain the number of political parties to a greater extent than PR systems. Under single-member district plurality rule, the country is divided into geographic constituencies, and in each constituency the parties compete to win a single representative position (Powell 2000, p. 23). Applying the first past the post rule, the candidate who wins more votes than any other candidate, in other words a plurality, wins the district. Following the same logic, in a single member district, only the two leading candidates have real chances of winning. In a district with three or four representatives, the chances of the fifth, sixth and seventh candidate are negligible. Therefore, the expectation is that in a single-member district system, only two candidates will compete in each district, reaching an equilibrium. As the district magnitude increases, the number of candidates also increase (Powell 2000, p. 24). In a nutshell, a a single-member district vote leads to a two-party system, while PR translates to a multi-party system. This is of course, a reductionist view; in reality, there is a large variation on the majoritarian - PR system dichotomy.

Scholars have proven that greater diversification in a party system leads to greater congruence at the mass-elite level (Dalton 1985, Wessels 1999). More specifically,

systems which are more proportional differentiated offer better political representation of citizens' preferences at the EU level (Dalton 1985), in (Belchior 2013). In a party system with a higher number of parties, voters are more likely to find a party which will match their political preferences. The congruence between voters and their representatives has been the focus of a long line of studies, initially arguing that PR systems do better in terms of representing citizens' political preferences (Bingham Powell Jr 2009). Although challenged by Blais & Bodet (2006) and Golder & Stramski (2007), I hypothesize that *countries with a more proportional electoral system present higher levels of congruence (H2)*[6]

District magnitude

One of the most important determinants of proportionality, from an institutional design perspective, is represented by district magnitude (Sartori 1976, Taagepera & Shugart 1989). Rae (1967) emphasized for the first time the role of district magnitude, defined as "the number of seats assigned to the district".

According to Powell (2000), the variation among the single-member districts may due to the multi round run-offs, when candidates are unable to reach a threshold, or can use a preference ordering system among the candidates. When it comes to proportional representation systems, the district magnitudes can in various ways: multiple tiers for candidates who are chosen according to different rules, ordinal preferences possibilities, different formulas used for calculating the unused votes, and different thresholds for voter support, necessary for achieving representation (Powell 2000, p. 25).

Larger district magnitudes lead to increased proportionality, therefore in a system with more parties. But, as suggested by Blais & Carty (1990) and Taagepera & Shugart (1989), greater district magnitude leads to increased proportionality only in PR systems, while in plurality systems it leads to a decrease. However, the findings about the effects of district magnitude are mixed; while Lijphart (1999*b*), Blais & Carty (1987) show that higher district magnitude leads to higher disproportionality in plurality systems, Benoit (2001), Niemi et al. (1991) prove exactly the opposite. Investigating into these mixed results, Eggers & Fouirnaies

[6]As mentioned above, the small number of majoritarian systems within the EU prohibits me from using that divide, therefore as Golder & Stramski (2007) suggest, I am using the measure of disproportionality.

(2014) show that the increased district magnitude decreases proportionality in plurality systems only when it is accompanied by a reduction in the number of districts. They blame the controversy about the effects which district magnitude has on representation on the different levels of analysis used (system-level or district-level) Eggers & Fouirnaies (2014).

District magnitude represents the central element of electoral system design, with a direct impact on the proportionality and the fragmentation of the party system (Taagepera & Shugart 1989, Carey & Hix 2011) and others. In accordance with this line of thought, while accounting for district magnitude, one has to account for party system fragmentation[7] and the degree of proportionality of the electoral system, which was addressed above.[8].

Moreover, in PR systems with larger electoral districts the voters face an increased number of political options, contributing to higher levels of congruence. Therefore, *countries with large district magnitude present higher levels of congruence (H3).*

Polarization

Often overlooked in favour of a measure of the quantity of parties in an electoral system, polarization deals with the quality of party competition. Polarization is, as some would argue, more important in the sense that it influences ideological voting (Dalton 2008). The polarization of a party system reflects 'the degree of ideological differentiation among political parties' (Dalton 2008, p. 900). The concept was inspired by Downs's (1957) work, whereby he introduced the concept of a spatial model of party systems, where parties are spread along a Left-Right continuum. In a two party system the parties would converge towards the centre, while in a multi-party system they would be situated alongside the Left-Right dimension. Although the focus is primarily on the number of parties, Downs

[7]Operationalized as the effective number of parties, electoral or legislative

[8]Given the particularities of electoral systems, the greater the magnitude of the electoral districts, the more candidates (Powell 2000) In PR systems, greater district magnitude increases proportionality, but in plurality systems leads to a decrease (Blais & Carty 1990, Taagepera & Shugart 1989). Therefore, between the district magnitude and proportionality (where proportionality equals a higher number of parties) the relationship is not linear; it is a different relationship for PR and for plurality systems. This is why I test both the effects of district magnitude and proportionality.

(1957) emphasized that in a multi-party system voters benefit from a wide range of ideological options. With parties focusing on their doctrine, more precisely on the differences among them, the voting decisions are more rational.

Following Downs (1957), Sartori (1976) identified that the location of parties on the Left-Right continuuum is affected by both centripetal and centrifugal forces. Most of the time, in multi-party systems, these centrifugal forces produce a pattern of polarized pluralism Sartori (1976). For a long time, it was thought that the number of parties was a reflection of polarization, and was used as a surrogate measure. However, Dalton (2008, p. 902) argues that party system polarization has a more direct influence both in terms of the patterns of electoral behaviour, as well as the characteristics of the electoral systems under consideration. Although more difficult to measure than its surrogate, the discrete number of parties, polarization should not be overlooked. Illustrating how parties are dispersed along an ideological scale, polarization also portrays the range of ideological choices. It is possible that an even more important aspect is that polarization and fractionalization can vary almost independently of one another (Dalton 2008, Gross & Sigelman 1984).

Comparing party systems on their degree of polarization requires not only the measurement of the ideological position of parties but also their vote shares. The polarization was estimated from direct and indirect indicators, such as the number of political parties, the vote share of the extremist parties or the size of the extremist parties (Powell 1982). Dalton (2008) developed a new measure of polarization, focusing on the the perceptions of the electorate within a nation, using CSES data. The measure is based on the positioning of the parties in their respective countries by their citizens. The polarization index follows the formula :

$$P = \sqrt{\sum_{i=1}^{n} v_1(\frac{p_i - \bar{p}}{5})^2} \tag{1}$$

where i represents individual parties, v is vote share, p is party position and n is the number of parties. If all the parties ocuupy the same position, it has the value of 0, and the value of 10 when all the parties are split between the two extremes of the scale (Dalton 2008). *Countriess with higher polarization present higher levels of congruence (H4)*

Old versus new democracies

Probably the most obvious factor influencing congruence has to do with the differences between the post-communist democracies of Eastern Europe and the established democracies of the West (Dalton 2017*b*, Rohrschneider & Whitefield 2012). Levels of party identification and the effects of partisanship on voting are weaker in the developing democracies of Eastern Europe, due to the fact that political elites needed to learn new procedures in organizing and sustaining political parties, and additionally in organizing and carrying out electoral procedures. The post-communist democracies present higher levels of electoral volatility and fragmentation.

Conversely, the party systems of Western Europe are institutionalized and more stable. Having a longer history, therefore a longer experience with the parties, voters can learn and trust the policies presented by their parties. Accordingly, one would expect *a higher congruence in the old democracies within Western Europe compared to the post-communist democracies of Eastern Europe (H5).* However, the results of recent studies yield mixed results on the contrast between the East and West in relation to congruence (Dalton, Farrell & McAllister 2011, Dalton 2017*b*, Rohrschneider & Whitefield 2012). It is important to note is that most of the studies on this topic employ a measure of Left-Right congruence.[9] and an aggregate measure of the position of citizens

Preeminent presentation studies stress the the incomparability of political competition between the Eastern and Western Europe. Challenging these results, Rovny & Edwards (2012) show that while the structure of competition remains distinct, the axes of competition in the East mimic those of the West. Their findings target niche parties, that tend to emphasize the social dimension over the economic one. I will delve into these findings in the next section, which focuses on the features of political parties as predictors of congruence.

As shown by the mixed results of the studies mentioned throughout this section, there is scope for a more careful and detailed analysis of the relationship between the characteristics of the electoral systems and political representation. Having discussed different system level characteristics and their potential effects on con-

[9]Except Dalton (2017*b*)

gruence, the next section sets out the prerequisites needed to explore the effect of party level characteristics on congruence.

2.4 Party characteristics and their influence on congruence

Previous studies tend to treat systemic and party level predictors of political representation under the same concept, called institutional factors. While the electoral system influences the party system, the reverse is equally true, making it difficult to discern between the two. However, these characteristics do not vary within a country, so for that reason they were placed under the same category. The discussion now turns towards party characteristics, where the most used predictors of congruence are the ideological position, party family and size of the party (Dalton 1985, Powell 2000).

Belchior (2013) argues that the ambiguity in the literature regarding the significance of electoral and party systems may be solved by using substantive policy variables, rather then the Left-Right dimension. Furthermore, she recommends the use of other independent variables, such as the type of government[10], the number and salience of political cleavages, and the importance of being in government or in opposition. Following the results and recommendations of recent studies, this section focuses on the way in which specific party level features encourage voter-party congruence, such as governmental status[11], the niche/mainstream party differentiation, as well as the ideological leaning of a party.

Parties are the central element of a political system and therefore the focus of representation studies. Early works on political representation as congruence tested the effect of party level predictors such as the mass/catch all party dichotomy, the centralization of parties[12], governing experience and ideology Dalton (1985). Although the relevance of some of these predictors can be questioned today, such as the mass/catch all party dichotomy, most of them are highly relevant and

[10]Single or a multi-party government

[11]Regarding the nature and extent of a party's involvement in national politics, while accounting for election cycle

[12]Referring to its internal structure

intensely studied. Other party characteristics studied in relationship with congruence are incumbency status, ideological position (Hooghe et al. 2002, Belchior 2013) and party size (Dalton 1985).

Although it possesses a socio-demographic bias towards the young and better educated, the large number of VAA users incorporate groups who are not easily accessible through traditional surveying tools, such as niche party supporters. Therefore, the opportunity to test for the effects of the niche/mainstream party dichotomy on congruence is one the main advantages presented by VAA data - a point that will become recurrent in the empirical chapters. The following section describes the party level characteristics which are hypothesized to influence congruence. These characteristics include, but are not limited to, the niche/mainstream party dichotomy, governmental status of the party, the election cycle and ideological leaning of the party.

The centrist party position

As mentioned above, most congruence studies tend to place the predictors under the same umbrella of institutional factors. The reason for this is that there is a fine line between systemic and party level features, most of it having to do with the electoral system. An important differentiation between electoral systems lay in the pattern of competition, where centrifugal incentives are attributed to PR systems, and centripetal incentives to plurality systems. Studies of multi-party competition conclude that the proximity to the mean voter position matters. In other words, the parties benefit when placing themselves around the mean voter position. According to Downs's (1957) spatial theory, parties competing in a two-party system will gain electoral support by converging towards the center of the citizen distribution.

Despite this fact, studies on electoral competition offer conflicting results. When assuming deterministic policy voting, the optimal strategy for parties would be to adopt non-centrist positions (Adams 2001*a*, Cox 1990). In the models focusing on probabilistic voting, the results suggest that parties increase their support when shifting towards the mean voter position (Lin et al. 1999). However, more recent work (Schofield 2003, Schofield & Sened 2005) brought evidence against this view, suggesting that additional models of deterministic voting that add *valence*

dimensions to voters' evaluations indicate that parties should take non centrist or extreme positions. The *valence* dimension represents a non-policy influence on voting and includes voters' evaluations about the party leaders and their competence, integrity and charisma. Similarly, Adams & Merrill (1999, 2000) suggest that when non-policy related influences are introduced to the probabilistic model, the parties are expected to shift from the center of the voter distribution, in order to enhance their vote share.

Belchior (2013) tested the predictors of ideological congruence at a micro, meso and macro level, following the main approaches in the political representation literature. The research uses data to the 2009 elections to the European Parliament, collected through the PIREDEU project. While the results indicate that system level characteristics, such as the proportionality of the electoral system and the level of fractionalization do not determine the level of MP-voter congruence, Belchior (2013) emphasizes the relevance of political parties' characteristics and their electoral strategies, indicating that larger centrist parties present higher levels of Left-Right congruence between their MPs and voters. In other words, the congruence increases with the party size. This contradicts earlier findings, whereby centrist parties present less agreement with citizens, due to the lack of distinct positions on issues (Dalton 1985).

The centrist party hypothesis argues that when parties position themselves on the Right, or the the Left, or on singular issues, they do better in terms of representing their supporters. Consequently, I hypothesize that *parties at the centre of the ideological spectrum are less congruent with their supporters (H6).*

Niche parties

Following the same line of studies as Belchior (2013), Ezrow (2010) analyzes whether it is advantageous for parties to take centrist positions. They also address the question of whether electoral systems affect the diversity of policy alternatives that parties offer to citizens. Ezrow (2010) argues that electoral systems matter for political representation, but not in the ways that are commonly accepted. His central argument is that electoral systems play an important role for political representation due to their influence on the balance between mainstream and niche parties. The niche parties have tremendous implications for

political representation and affect the electoral competition. All in all, the electoral systems matter because they exert influence on the level of niche party competition (Ezrow 2010, p. 17).

In his work on the linkages between citizens and parties, Ezrow (2010) develops four models of political representation: the general electorate, the party proximity, the partisan constituency and party distinctiveness models. He argues that plurality systems lack the niche party competition, meaning that these systems are deprived of alternative channels of citizen representation. As a consequence, the citizens in plurality systems cannot reward their parties for policy distinctiveness (Ezrow 2010, p. 121). Furthermore, parties in plurality systems respond only to changes in the mean voter position, while in PR systems niche parties respond to the changes in the mean constituency position. In a nutshell, while the PR systems present four models of political representation: partisan constituency, general electorate, party distinctiveness and party proximity models, the disproportional systems enclose only two - the general electorate and party proximity models.

While (Ezrow 2010) suggests that by their presence, niche parties improve the degree of representation in a party system, Belchior (2013) argues that by moving away from the centre, parties lose congruence. The more radical parties tend to locate themselves towards the margins of the voter distribution, away from the centrist voters, therefore losing congruence. Furthermore, her findings show that the electorate is situated at the centre of the ideological spectrum, while parties take more extreme positions, especially win the context of extreme right wing parties (Belchior 2013). If niche parties position themselves towards the extreme ends of the ideological continuum, to get closer to potential supporters (Ezrow 2010) one can argue that *niche parties present higher levels of congruence with their supporters, compared to mainstream parties (H7)* and following Ezrow (2010), that *niche parties will present higher congruence with their voters on the in systems with higher proportionality (H7a).*

Dividing policy issues into economic and social dimensions, Rovny & Edwards (2012) argue that mainstream parties are competing mostly on the primary dimension by emphasizing economic issues. Niche parties, seen as systematically disadvantaged, compete on a secondary dimension, emphasizing social issues.

Accordingly, I hypothesize that *mainstream parties will present higher congruence with their voters on the Economic issue dimensions (H7b).*

Furthermore, because there are less niche parties in Eastern Europe, I expect that *Eastern European democracies will present lower levels of congruence on Social issues (H7c).* This hypothesis is based on the assumption that because there are less niche parties in Eastern Europe compared to the West, there is an absence of parties with the ability to push social issues onto the political agenda; consequently, the political competition revolves around economic issues, where mainstream parties are in closer agreement with their supporters.

Governmental status

Another variable of interest is governmental status, which refers to the nature and the extent of a party's participation in national politics. It is similar, but not to be mistaken with "governing experience", which is a record of the length of government participation (Dalton 1985, Rose & Mackie 1983). A party is considered "high" on governmental status if it holds cabinet positions, holds a majority of seats in the legislature, receives strong electoral support in elections and is identified with the chief of executive (Janda 1980). In its simplest form, the distinction is between opposition and government parties. Government parties tend to be larger, situated at the center of the political spectrum. The centrist tendency is explained by the compromises that must be made for government participation (Walgrave & Lefevere 2013). Based on the centrist tendency, it becomes unclear for voters to discern the real stances of government parties. Being in the government or part of a government coalition may lead the parties to loose some of their ideological edge (Blais & Bodet 2006, Walgrave & Lefevere 2013). Accordingly, *parties with high governmental status present lower levels of congruence with their supporters (H8).*

Accounting for governmental status alone is not enough, as the time of the elections also matters. Reif (1984) brought up the concept of electoral cycle, which accounts for the period of time between national and European elections. The expectation is that *if the European elections are closer to the national ones, the parties with high governmental status will present lower congruence levels*

(H8a).[13]

Looking at the positions of the parties on the topic of European integration, Hooghe et al. (2002) show that as a party leans to the Right, it is more likely to favour European integration, which therefore highlights the importance of ideology. Focusing on party characteristics which are not captured by the Left-Right continuum, both Hooghe et al. (2002) and Arnold & Franklin (2012) hypothesize that the further from the centre a party's ideological position is, the less likely that it will favour European integration. Incumbency status, otherwise known as governmental status is another characteristic tested in relation to attitudes towards European integration (Arnold & Franklin 2012) or governmental status, as I referred to it earlier on. It was hypothesized that incumbent parties are more likely to be in favour of European integration (Arnold & Franklin 2012). All these aspects can be looked at when focusing on the EU issue domain. I hypothesize that *on EU issue area, parties with high governmental status will tend to present higher levels of congruence (H8b).* The general hypothesis is that high governmental status leads to less congruence, because the parties in government have to accommodate more views and make themselves appealing to the median voter.

The next section deals with individual level characteristics that shape congruence. The vast scholarly literature on political representation focuses on system or party level predictors, neglecting the individual level, with one notable exception in the work of Walgrave & Lefevere (2013) and to a lesser extent, Belchior (2013).

2.5 Placing the voter at the centre of the representation process

The vast scholarly literature on political representation provides explanation for congruence on a single, system or party level. With two notable exceptions Walgrave & Lefevere (2013) and to a smaller extent Steenbergen et al. (2007), research on congruence has overlooked the individual characteristics. As Wal-

[13]The election cycle variable will be used in interaction with the variable measuring governmental status.

grave & Lefevere (2013) point out, in studying congruence, one should start with the voter. Ultimately, it is the voter who matches her political preferences with those of the parties. As the review of congruence studies shown, the vast literature offers mixed results, that may be due to the various conceptualizations of congruence, but also to the different determinants tested. Looking at the lowest level of analysis may be the best solution. In this section, the focus is on the individual voter and her characteristics, such as political interest, educational attainment and other demographic characteristics.

There are two possible explanations to the question of what is responsible for the lack of congruence between parties and voters Walgrave & Lefevere (2013). Parties can be blamed for hiding their less popular positions, while emphasizing their more popular policies, or being ambivalent. Alternatively, a lack of interest, motivation and capacity to process political information amongst voters is the main explanation. The strong effects of education and political interest led Walgrave & Lefevere (2013) to argue that the policy incongruence points in the direction of voter deficiencies. These arguments will be put to test in the empirical chapter.

Walgrave & Lefevere (2013) argue that the lack of detailed data on the political preferences of voters and parties is responsible for the lack of research that considers the individual level characteristics in addition to party and systemic level predictors.

Walgrave & Lefevere (2013) were the first to pose the question of determinants of policy incongruence between a voter and her preferred party. They argue that the individual policy incongruence is an area that was previously ignored, due to the lack of an analytical framework, or lack of data. They emphasize that previous work dealt mostly with a single level of analysis, and it did not take into account the possible interactions between different levels. Focusing on ideology, salience and complexity, their results show that voters' ideological inconsistency is a determinant of incongruent voting. Additionally, political sophistication measured as the level of education and political interest has a strong effect on voter incongruence. Walgrave & Lefevere (2013) assess congruence as whether a voter agrees or disagrees with a political party on a certain matter, and not in terms of the distance between a voter and a party on a particular dimension (Left-

Right, liberal-conservative) as widely employed in studies of proximity voting. One possible limitation of their study is the single country focus. Nonetheless, it offers important insights into how individual level characteristics are relevant for the study of party-voter congruence. Most importantly, it provides an avenue to further research.

In the seminal work of Luskin (1990), it is argued that only a small part of the electorate can participate in the politics to the fullest; an idea previously presented by Campbell et al. (1966) and Converse (2006). Firstly, 'participation is a variable' (Luskin 1990, p. 331), meaning that not everyone votes, and even fewer people participate in political campaigns. Secondly, the quality of the participation varies. Voting represents the easiest, most common, but also 'capricious' (Luskin 1990, p. 332) form of political participation. Voters are receptive and respond to the personal characteristics of the candidates as well as to the policy issues. Citizens' perceptions of politicians' personal characteristics and stances on policy issues vary, resulting in erroneous choices on their behalf. The citizens' performance in assessing political candidates reflects variations in cognition. While some people know little about politics, others know and think more about politics (Campbell et al. 1966).

Political sophistication, measured as political knowledge, is one of the prerequisites of legitimate political representation (Boonen et al. 2014). It is also essential, because a citizen with limited political knowledge is less likely to make a vote decision consistent with its own political preferences (Howe 2011). However, the empirical results on the relationship between political sophistication and congruence are mixed. Some studies have found that more politically sophisticated voters tend to vote for the party which is ideologically closest to them (Lau et al. 2014, Boonen et al. 2014), and those highly educated and politically interested are less likely to be incongruent with their preferred party (Walgrave & Lefevere 2013). However, Simas (2013) found no significant relationship between political knowledge and proximity voting. A caveat to Simas's (2013) study is that the results are limited to the US context (Boonen et al. 2014).

Building upon the assumption that political knowledge is necessary for legitimate representation and for a correct vote decision, and that political knowledge can be expressed through educational attainment and political interest, I hypothesize

that *those with high education are more congruent with their most preferred party (H9)* and *those with higher levels of interest in politics are more congruent with their most preferred party (H10).* By most preferred party, I refer to the party reported as vote intention in the upcoming European elections.

I will control for the socio-demographic characteristics, such as age, gender and education. These variables are included in order to remove the variance that is due to different demographic composition of electorates. This rests on the assumption that different parties have different electorates. For example, some parties may have better educated electorates. As Walgrave & Lefevere (2013) shown, these educated electorates are more congruent with their preferred party. Following Steenbergen et al. (2007) and Walgrave & Lefevere (2013), this thesis includes political interest to account for the fact that more interested voters may be more knowledgeable about party positions and they are more likely to choose the party that is closest to them.

Another important individual characteristic is represented by the type of party the voter supports, be it mainstream or niche. Following the logic developed in the previous chapter, where niche parties were discussed extensively, I will focus now on the potential effect that being a niche party supporter has on congruence. Following Ezrow (2010), niche parties improve representation by offering more channels of representation. His argument is follows a numerical logic, where a larger number of parties translates into a wider range of political choices on offer. A large variety of parties increases the chances that a voter finds a party that matches her political preferences. Studying the link between salient policy issues and congruence, Giger & Lefkofridi (2014) show that congruence is higher between niche parties and their supporters.

Given the results of previous studies and the theoretical expectations about niche parties set in the previous section, I hypothesize that *Niche party supporters are more congruent with their most preferred party, compared to mainstream party supporters (H11).*

Last but not least, because issues are compiled into issue domains, one can observe whether voter characteristics weigh more from one issue area to another.

Before ending this section, I would like to return to a point introduced at the end

of the previous chapter, highlighting the advantages of assessing congruence with the help of VAA data. Signaling the very limited use of individual level attributes in investigating the link between voters and their representatives. Walgrave & Lefevere (2013) bring up the problem of data scarcity that has citizens and parties measured on the same scale. Achen (1977) was the first to touch upon the most important aspect in studying congruence, namely estimating the positions of the citizens and the positions of their representatives on the same scale, i.e. Left-Right scale. Employing VAA data, congruence can be assessed on a series of political issues, including economic issues that usually represent the Left-Right dimension. As emphasized before, the main advantage of VAA data is having both citizens and voters express their preferences on the same issues, on the same scale.

This chapter has laid out the theoretical foundations of the thesis, structured along systemic, party and individual level predictors and their associated hypotheses. In the next chapter I will present the research design of this thesis.

3 Research design

3.1 Introduction

In order to test the central hypotheses of this thesis, data from the European Union member states is employed. Because this thesis explores issue congruence, I am using data on voters' and parties' political preferences from the 2009 and 2014 European Parliamentary elections. In this chapter, I develop the central element of this thesis, issue congruence and explain why the elections to the European parliament are a good testing ground for the hypotheses formulated in the second chapter. I proceed by introducing the levels of analysis, the data sources, together with the limitations of VAA data. I then discuss the modeling strategy, followed by the main element of the thesis, namely issue congruence. I explain how the measure of congruence is constructed and provide a snippet of descriptive statistics on issue congruence across issue dimensions. The chapter ends with the operationalization of the variables used in the empirical chapters of the thesis.

One of the early studies of citizen-party elites congruence was conducted by Dalton (1985) in a rather novel setting. The data he used was collected in the period preceding the first elections to the European Parliament of 1979. Rather than focusing on the elections *per se*, Dalton (1985) used the citizen survey (the Eurobarometer 11) and linked it to the study of MEPs to look at how well parties perform their representation role. More than three decades later, he re-tested the hypotheses, on data collected in the context of 2009 European Parliament elections (Dalton 2017*b*). He focused on the relationship between voter and party elites, searching for congruence between the two. In a similar fashion, the two Voting Advice Applications, 2009 EUProfiler and 2014 EUvox provide a perfect setting and a rather unique opportunity to look at the relationship between parties and citizens in the context of two European elections.

In a similar fashion to Dalton (1985, 2017*b*) in this thesis I investigate the relationship between citizens and their most preferred political parties, understood as issue congruence. I also explore the way this relationship is shaped by different features of the electoral system, party type features and the individual characteristics of voters. The scholarly literature on political representation and

its predictors is vast, due to the numerous approaches to assess the match between citizens and their representatives. While most studies focus on ideological congruence, this work uses issue congruence. Furthermore, it contributes to the scholarly literature on issue congruence by offering a cross-country analysis, using VAA generated data collected in the context of 2009 and 2014 elections to the European Parliament.

3.2 The conceptualization and measurement of congruence

In order to address the research questions formulated in the previous chapter and their subsequent hypotheses, one has to delve into its central element, namely issue congruence. As illustrated in the previous chapters, political representation is a broad concept, incorporating policy responsiveness, accountability, vote-seat disproportionality and congruence, among others. Given the complexity of the concept, congruence represents one way of assessing political representation, and does not explain it entirely. Congruence is seen as the mirroring of the political preferences of voters to the political stances of parties. In this work, the focus is on congruence as an indicator of the degree of matching of policy preferences of users and their most preferred political party.

Most representation studies that focus on congruence refer to ideological congruence (Huber & Powell 1994, Powell 2004, Blais & Bodet 2006, Golder & Stramski 2007, Bingham Powell Jr 2009, Belchior 2013). In contrast, the present work focuses on issue congruence. While there is an important distinction between ideological and issue congruence, the ontology and epistemology of the two concepts are somewhat similar. In what follows, I will introduce the concept of congruence, encompassing both ideological and issue congruence. Although the former is not the focus of this work, it will help to build the argument around issue congruence, assessed with the help of VAA generated data. Later on, I will differentiate between the two, making the case in favour of issue congruence.

As stated above, political representation can be operationalized through congruence, as the distance between the citizen and the representative (Huber & Powell 1994, Powell 2004). Issue congruence is the correspondence between party elec-

torates and their representatives across a set of salient policy dimensions (Powell 2004). VAA generated data provides a new means of measuring congruence. Departing from the concept of representative deficit (Alvarez, Levin, Mair & Trechsel 2014), that mirrors the political preferences of users' that are not incorporated and represented by the political offer, I propose a new measure of congruence. This measure is based on the distance between the citizen and the party the citizen intends to vote for in the upcoming European elections on a series of 28, respectively 22 political statements. Furthermore, although the effect of electoral systems on the number of political parties, social representation, vote-seat disproportionality, and ideological congruence is well researched, representation on issues is mostly inferred from alternative interpretations of congruence. The measure of issue congruence created with the use of VAA generated data contributes to a better understanding of political representation in the EU political space.

3.2.1 Conceptualizations of congruence: from *one-to-one* to *many-to-many*

In most simple terms, congruence can be explained as the distance between a citizen and its representative (Dalton 1985, Thomassen & Andeweg 2004), where the representative can be a candidate, a political party, a member of the parliament or a member of government. In the introductory chapter I discussed how congruence can be conceptualized as a *one-to-one*, *many-to-one* and *many-to-many* relationship. The *many-to-one* relationship can be interpreted as one between many citizens and one representative, and is the approach I follow in this thesis, where *many* are the supporters of a particular party and *one* is the political party. The *many-to-one* relationship can be further assessed as *absolute median citizen*, *absolute citizen* and *relative* congruence.

As argued in the introductory chapter, the conceptualization of congruence as a *relative* measure is the most appropriate when one compares congruence across different units of analysis, such as the European Union member states. Compared to *absolute citizen congruence*, which looks at the distance between the median citizen and the party the citizen intends to vote for, *relative congruence* encompasses information about the distribution of citizens' preferences. More

precisely, in calculating the congruence score of a citizen with its most preferred party, information about the congruence scores of all the supporters of the respective party are included. The idea behind Golder & Stramski's (2010) measure of relative congruence is that their new conceptualization reflects the presence of a legislature that 'accurately reflects the ideological preferences of the citizenry as a whole'. In a similar fashion, I look at the whole supporter base of a party.

Although one of the most popular approaches, the conceptualization of congruence as *absolute median citizen* is not appropriate for cross-country comparisons. This is because the Left-Right dimension is not perceived similarly across contexts. However, because in this work congruence is assessed on policies, which are similar across countries and use the same metric, I will make use of this *absolute median citizen* approach, in addition to a *relative* one.

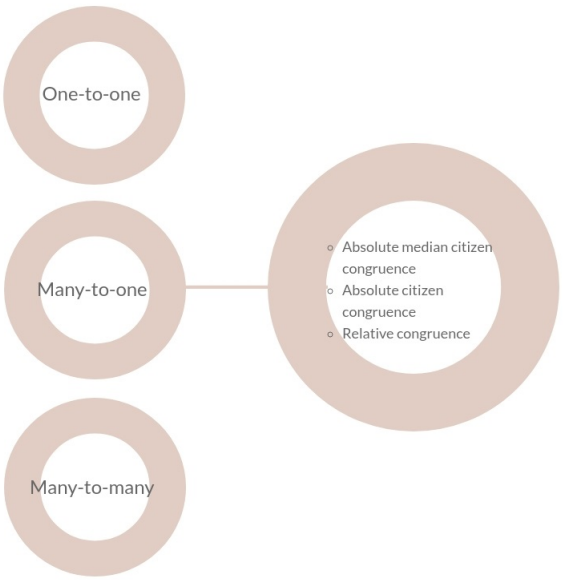

Figure 2: Conceptualization of congruence, Golder & Stramski (2007)

The decision to employ two different approaches to assess congruence is based on methodological considerations. The main reasons is to support the debate initiated by Blais & Bodet (2006), Golder & Stramski (2010), who argue that the measure of congruence employed has a great impact on results. Accordingly, different measures of congruence can offer different portrayals of representation.

The second reason has to do with the levels of analysis on which this work is built. As stated before, this thesis investigates the match between the voter and her representative, while controlling for predictors at the country, party and individual level. While only the *absolute median citizen* can be assessed at an individual level, both approaches can be used to assess congruence at the party and country level. Because the aim is to investigate the effect of individual level characteristics, a measure of congruence at individual level is needed.

The conceptualization of congruence presented above is based on studies that conduct cross-national analyses (Achen 1977, Blais & Bodet 2006, Golder & Stramski 2010). Although there are other relevant studies dealing with the conceptualization of congruence, they have been overlooked, because this study follows a comparative approach. It is important to mention that in this work, congruence is defined as the distance between prospective voters and the parties that competed in the elections to the European Parliament in 2009 and 2014. More precisely, it assesses the proximity between the citizen and the party she intends to vote for.

Before proceeding to develop the measures of congruence, I will first discuss the different approaches and the types of data used for assessing congruence. I will also build the argument for the approach used in this thesis, the *citizen survey/expert survey* approach. The discussion follows the classification developed by Bingham Powell Jr (2009).

3.2.2 Different approaches to measuring congruence

This section presents the approaches used in measuring congruence and the type of data used in each approach. The measure of congruence used in this thesis is assessed through VAA generated data, that fits under the *citizen survey/expert survey approach*, with minor changes.

In his work on the *ideological congruence controversy* Bingham Powell Jr (2009) develops a classification of approaches used in measuring congruence that is extremely relevant for a proper understanding of congruence, both ideological and issue based. Bingham Powell Jr (2009) identifies three different approaches to estimating the distance between citizens and the government. The common el-

ement of these approaches is the procedure used to assess the government or median legislator's position. This is 'based on the separately estimated positions of the political parties which form the government, weighted either by the percentage of legislative seats or their percentage of cabinet portfolios' (Bingham Powell Jr 2009, p. 1477). In what follows, the approaches to measuring congruence, *the citizen survey/expert survey approach*, *party vote/party manifesto approach*, and the *citizen identification/citizen perception* approach are presented, together with their advantages and disadvantages.

The *citizen survey/expert survey* approach uses surveys in which citizens are asked to place themselves on the Left-Right continuum. The self-placement is then used to identify the position of the median citizen. The positions of parties are identified using expert surveys, where political experts place the parties on the Left-Right scale. The government's or median legislator's position is estimated from the party positions. Also, it is assumed that all legislators within a party mirror the party position. Finally, congruence is assessed as the *distance between the median legislator/government* and the *median citizen*.

This approach was extensively used in early work on political representation (Huber & Powell 1994, Powell 2000, 2006). The strengths and critiques of this approach lay both in the method of data collection used, namely expert surveys. While the experts may have the best knowledge regarding the positions of the parties, expert surveys are scarce. Furthermore, expert surveys are done in long time intervals, whereas it is possible that the positions of the parties change in the meantime.

As Bingham Powell Jr (2009) points out, one cannot be sure that experts and citizens have the same things in mind when they place the parties, by themselves on the Left-Right scale, therefore affecting the comparability of each position. Another critique of expert surveys is that while experts place all parties on the Left-Right scale, they know better the positions of largest parties, and not so much the political stances of niche parties, leading to errors in coding (Bingham Powell Jr 2009). Furthermore, party placements and citizen surveys are not done concomitantly. Expert surveys do not account for changes in the parties' political stances from the timing of the expert survey to the citizen survey, which can affect the reliability of comparisons.

The second approach, *party vote/party manifesto*, is based on the work built around the Comparative Manifesto Project (Budge 2001). This project coded elections manifestos on 56 different topics, along many elections and many countries, starting from 1946. The positions of the parties on a Left-Right scale are estimated based on the mentions of various topics in election manifestos. The position of the median voter is estimated using the parties' positions and the distribution of party votes, based on the assumption that the voter will give her vote for the party which is ideologically close to her. Similar to the previous approach, congruence is measured as the *distance between the median voter and government or median legislator*.

The strength of this method lays in the nature of the data. Manifestos contain the promises made by the political parties themselves. The votes are believed to be a more accurate representation of a political position, compared to the answer of a survey question. The main critique of this approach is the estimation of the median voter's position. One cannot assume that votes represent the true political beliefs of citizens. As exemplified by Bingham Powell Jr (2009), if a voter supports a political party just to punish the incumbent, the vote does not reflect the voter's true preferences. This is true for other forms of insincere voting, as well.

The third approach, *citizen identification/citizen perception*, is based on citizen surveys, where respondents are asked to place themselves and political parties on the Left-Right scale. This approach uses data from the Comparative Study of Electoral Systems project, started in 1996. Congruence is measured in the same way, as the *distance between the citizen and the legislator/government*. The main advantage of this method is that it allows citizens to place themselves on the Left-Right scale, and to place the parties as well. Recent studies that challenge the representational advantage of PR over majoritarian systems (Blais & Bodet 2006, Golder & Stramski 2007) made slight changes to this method. Because the positions of the citizens were individually measured, they build a measure of congruence as an average distance. Furthermore, Golder & Stramski (2007) weigh the average distance to take into account the variance in voters' positions.[14]

[14]In Golder & Stramski's (2007) measure of congruence, the position of the government

While this method addresses one important caveat of the previous approaches, namely the positioning of voters and parties on different scales, it assumes that citizens are well informed about the positions of the parties. But as the levels of political interest vary between citizens, political knowledge varies as well, raising questions about the validity of this assumption.

The measure of congruence developed in this thesis, based on VAA generated data can be accommodated by the citizen survey/expert survey approach, with some differentiations, that I subsequently tackle. First of all, while the *citizen survey/expert survey* approach uses the Left-Right dimension, VAAs use a series of political statements, usually 30, which encompass GAL-TAN issues alongside economic ones. However, due to data limitations, for the 2009 elections there are 28 common policy issues across countries and respectively 22 common policies for 2014 data.

Second, respondents differ; VAA users differ from ordinary survey respondents (*citizens*), by presenting higher levels of political interest and higher levels of education.

Third, in addition to the political experts who code parties on policy issues, in some instances political parties collaborate with VAA developers, corroborating their allocation of positions. This aspect represents an advantage compared to Golder & Stramski's (2007) measure of congruence, where the position of the government is based on citizens' estimates. All these make VAAs a reliable and valuable source of data on party positions and citizen preferences.

3.2.3 From ideological to issue congruence

The studies of ideological congruence assume the dominance of a unidimensional issue space (Bingham Powell Jr 2009, p. 1483), which is usually the Left-Right scale. It is assumed that the wide range of issues can be accommodated by an ideological continuum. But as more issues become salient, we need to consider a high dimensionality. As I mentioned in the beginning of this chapter, the concept of congruence was presented as a general concept, without differentiating between the ideological and issue based types of congruence. In this subsection

is assessed by looking only at the positions of parties as indicated by the top 40 percent of citizens, ranked by their levels of political knowledge

I will discuss how the two differ on a number of aspects.

First of all, as previously mentioned, congruence is measured as the distance between the positions of the representatives and the represented (Dalton 1985, Thomassen & Andeweg 2004). Most congruence studies compute a simple measure of mean Left-Right distances between the positions. When the distance between the position of the representative and the represented equals zero, the congruence appears. Computing congruence using the Left-Right dimension is not as clear cut as it appears. Because the Left-Right dimension self-placement is an ideological exercise, its results can differ from using positioning on substantive policies (Belchior 2013).

Second, although it is widely used, Left-Right positioning says little about the meaning of the positions. The magnitude of this problem amplifies when cross-country comparisons are made, because the meaning of the Left-Right dimension is different across countries (Benoit & Laver 2006). Furthermore, the positions of the voters have different meanings, since they are a larger entity than the legislators; consequently, high correlations between the positions of legislators and citizens do not necessarily mean high congruence (Belchior 2013).

Third, Thomassen (2012) argues that there is a blind corner in representation studies, because most of the work focuses on ideological Left-Right congruence, rather than on issue congruence. The Left-Right dimension has certain limitations, one of them being that certain issues are not included in the unidimensional issue space that is represented by the Left-Right continuum. Furthermore, he argues that scholars work on the assumption that representativeness on the Left-Right dimension automatically implies representativeness on other issues, which is a faulty assumption (Thomassen 2012, p. 13).

Another critique of ideological congruence is made by Dalton (1985, 2017*b*), who shows that voter-party congruence varies across issue dimensions and parties. He calls for more attention to be devoted to the problem of congruence measurement, and attributes the 'supremacy' of Left-Right congruence to the 'over-responsiveness of party elites to voter positions on the Left-Right scale, the limited ability of citizens' issue positions to predict party elites' Left-Right positions and the lack of relationship for the representation gap on separate issue

dimensions' (Dalton 2017*b*, p. 10).

Taking the argument against ideological congruence a step further, Giger & Lefkofridi (2014) argue that there is a lacuna in the studies of political representation, related to the limited use of issue voting. More specifically, they argue that by incorporating salience into the conceptualization and measurement of policy congruence, there is an important contribution to the scholarly literature put forward. Giger & Lefkofridi (2014) base their choice on the assumption that people present more accessible attitudes towards issues that are highly important to them, and are more likely to be better informed on these issues. Using data from 2007 Swiss elections, they create a novel measure of congruence that encompasses both the individual citizens' positions on policies, understood as proximity, as well as their priorities, understood as salience.

Giger & Lefkofridi's (2014) study is a perfect example of the use of VAA data in congruence studies. Following Golder & Stramski's (2010) conceptualization, Giger & Lefkofridi (2014) have built congruence as the individual distance between a citizen and the party the citizen voted for. In addition to seven policy issues on which both citizens and parties are placed, they include a measure of issue salience. The novelty of Giger & Lefkofridi's (2014) study lays in the measure of congruence used, which is salience-based congruence. In addition to using a citizen and expert survey, they also incorporate data from *smartvote*, a Swiss VAA. Giger & Lefkofridi's (2014) study makes a good case for the use of VAA data in studying representation. What this study yielded in terms of novelty for issue congruence studies is the focus on issue salience, as well as the use of VAA data. By integrating salience in the measure of congruence, their research presented a different picture of congruence, compared to previous studies, showing that niche parties seem to perform better than mainstream ones. I do not incorporate salience into the measures of congruence developed in this thesis due to data limitations, but I address this issue in the chapter seven.

The last argument, mentioned throughout the thesis, is that most of the research on political representation uses a Left-Right dimension for estimating the positions of citizens and parties. In doing so, one important requirement is that the placements of both citizens and parties must be done on the same metric; but due to data limitations this is most often impossible. As Erickson (2006) pointed

out, the inability to place citizens and representatives on the same metric continues to be a 'limitation that frustrates the contemporary work on representation'. As emphasized by (Thomassen 2012) there is a blind corner of representation, where voter-party congruence is attributed to the Left-Right dimension, while other issue areas are neglected - an idea also supported by Dalton (2017*b*). Given the limitations of the Left-Right dimension, as presented above, measuring congruence with VAA generated data offers a valuable alternative. Making the transition from ideological to issue congruence may offer more insights into the functioning of the representation process.

3.3 European parliamentary elections

The scholarly literature on European Parliamentary elections classifies them as second order, suggesting that there is less at stake, because the elections do not lead to government formation (Hix et al. 2006). However, they were first called second order elections by Reif (1984) exactly because they resemble national elections.[15][16] European elections provide the perfect context to study how people vote in second-order elections, to measure the level of support for the EU, and to identify the role played by EU issues in the process leading to a vote decision (Dalton 1985, 2017*b*). Following Dalton (2017*b*), the European parliamentary elections are treated here as an event where multiple countries held elections simultaneously and in which voters think about their policy preferences in order to decide their vote.

Briefly touched upon in the introductory chapter, 'the problem of second order elections' (Schmitt & Thomassen 1999) is not entirely a problem. Clark & Rohrschneider (2009) show that the choices voters make in second order elections are mostly based on the national context, while the European context weighs less.[17] What matters to voters are the stances of the political parties in

[15]In terms of the parties competing for votes

[16]The resemblance of national politics is extremely important for this thesis, because I am focusing on national parties, not European party families

[17]Because the political competition at the level of European Union resembles the national one, the parties that compete in the EP and national elections are more or less the same. However, not all national parties compete in the EP elections; as a consequence, the analysis developed in this thesis is limited to the parties that chose to partake in this competition. This

their national context, rather than their positioning on EU issues.

To sum up, for the purpose of this work, the second order nature of these two elections is not problematic. I am using the data generated during the 2009 and 2014 EP elections to study the linkage between the citizens and their most preferred party, while taking into account the features of each country's electoral system. EP elections are used here as a great research avenue, because as Farrell (2011) says, it presents the opportunity to 'craft powerful research design incorporating an unusual, indeed probably unique comparison, between members of the same political institution chosen under a range of different electoral arrangements (Farrell 2011, p36)'.

3.4 Levels of analysis

In order to capture the concept of congruence and to test its predictors as outlined in the previous chapter, employing a mixture of methods is necessary. The analysis is carried out at three levels of analysis, at the electoral system (or country) level, the party level and at the individual level. The universe of cases is within the boundaries of European Union. A *many-country comparison* approach is suited for the number of cases. The observational units are countries, political parties, and individuals.

Absolute citizen congruence is assessed at an individual level and it will allow me to test theoretical and data driven hypotheses focused on the individual level. Furthermore, an individual measure of congruence can be aggregated into congruence scores at the party, and then country level. The *relative congruence* is assessed at the party level, then aggregated at country level.[18]

The empirical chapter, with sections focusing on congruence at a country, party and individual level utilizes predictors at each of the three levels. Although the effect of institutional factors (country level) is widely researched, there is relatively less focus on party type and individual level characteristics. Recent research asks the puzzle of representation to be explained at these lower levels

limits the choices a voter has; if its most preferred party is not competing in the EP elections, the vote will go to her second preferred party, overestimating the support this party receives.

[18]The averages are country level are not used in the regression models, they are used solely for descriptive purposes

(Belchior 2013, Walgrave & Lefevere 2013). Figure 3 presents an illustration of the levels of analysis.

Figure 3: Predictors of congruence

The participants are VAA users who consulted EU Profiler and EUvox tools in the campaigning period of the 2009 and 2014 European Parliament elections. Data was collected through the VAA platforms *www.euprofiler.eu* and *www.euvox2014.eu*. As explained in the introductory section, the participants went through a self-selection process to use the VAA tool, which was available online in the six weeks prior to the elections.

In what follows, I will present the 2009 EU Profiler and 2014 EUvox, the two pan-European Voting Advice Applications that generated the data employed in this thesis. I will also emphasize the advantages of using VAA data, compared to more conventional survey data. Although severely criticized for a lack of representativeness, VAA tools reach those unlikely to participate in traditional surveys, such as young people or those with more extreme political views. Given that some population categories are over-represented in the data, the results will be biased towards these demographic categories. I will address this bias in the next section.

3.5 Data sources

Data generated by VAA tools contributes to a better understanding of electoral behavior, at relatively low costs, but with serious limitations regarding the representativeness of the results. The increasing number of VAA platforms and VAA users generate large amounts of data, granting access to users' political preferences and political parties' stances on policy issues. These data can be used to answer questions about voting patterns and political representation, but most importantly, it allows researchers to investigate the electoral behaviour of young people, or of niche party supporters, who are not easily reached by standard surveying tools. The bias associated with VAA data presents a big drawback, but VAA researchers are in the process of finding proper statistical adjustments, such as post-stratification, that will fix the problem of representativeness.

Besides providing large amounts of data on users' political preferences at low costs, VAA tools present an important advantage compared to conventional surveying tools. While the political preferences of the respondents are usually captured through propensity-to-vote questions (PTV) and the placement preferences on the Left-Right scale, the VAA tool uses placement on a series of policy issues.

Among the critiques brought against VAA data is the varying response rates across countries. While some countries, such as the Netherlands or Switzerland have millions of users, others, such as Romania or Bulgaria have only a several thousands. For the purpose of this research, these differences can translate into overestimating congruence in the countries with low response rates. The reason for this is that the bias in a small VAA sample is likely to be exacerbated. In what follows, I will present the two sources of data, the 2009 EU Profiler and 2014 EUvox.

EU Profiler is the first pan-European Voting Advice Application, that ran in the 2009 campaign election for the European parliament. The VAA was set by The European Union Democracy Center (EUDO) at European University Institute, together with the Dutch VAA provider, Kieskompas and the University of Zurich based Smartvote. The application ran in 30 countries, 24 languages, the 6 weeks previous to the elections, generating 2.5 million unique visitors, and 900.000 user profiles. The positions of 274 political parties in Europe were documented by

approximatively 130 collaborators (Trechsel & Mair 2011). Among the issue statements, 28 were identical across countries, while 2 were country specific.

The application also allowed users to indicate the salience of issue (Alvarez, Levin, Trechsel & Vassil 2014). Besides the political preferences, the VAA captured the user's party preferences through the propensity-to-vote (PTV) question, asked before the VAA advice was presented to the user. A second PTV question was addressed after the user was presented with a VAA recommendation. 600.000 users filled out the application up until this point. 20.000 users also filled out the extra questionnaire, comprising information on socio-demographic variables, political attitudes and a second PTV question. For the purpose of this thesis, which is a cross-national study, from 30 issue statements in the VAA, I will use only 28 questions that were identical across countries, discarding the 2 country-specific questions. In creating the measure of congruence, I will use the positioning of users on each of the 28 common policies, the position of parties on the same policies, and the information about vote intention. I will use the demographic information provided by users as control variables.

EUvox is another pan-European VAA, developed for the 2014 European Parliament elections. As with the EU Profiler, the purpose of the application was to advise citizens in selecting the political party that best matches their political preferences. The project was set by the Kieskompas and PreferenceMatcher, two experienced organizations in the field of VAAs. Similar to EU Profiler, the questionnaire included European-wide topics, issues that are important to voters of a particular region, and country-specific issues. The VAA was launched 4 weeks prior to election date and gathered a total of 2 million users across 27 European countries. Following the logic of EU Profiler, the questionnaire comprised of 22 statements that were common to all EU countries, and 8 country-specific questions. Similar to the first data source, I will use the position of users on policies, party placements, vote intention and demographic information.

VAAs are based on a rational logic of voting, also called issue voting, as emphasized in previous chapters. Some VAAs, such as EU Profiler and EUvox use spatial modeling techniques for placing a party in its appropriate political space. The Dutch Kieskompas was the first one to use spatial models, based on the assumption that the political competition is structured alongside a limited set

of dimensions (Krouwel & Fiers 2008). Following the spatial theory of electoral choice, a voter will choose the candidate/or party which is in her closest proximity on policy positions (Garzia & Marschall 2016, p. 50). Parties are positioned on 30 policies, on a 5-point Likert-type scale, from *fully disagree* to *fully agree*. Each policy statement is assigned to one of the dimensions. The political space is represented by two, sometimes three dimensions. The parties are placed within dimensions by averaging their position on all issues pertaining to a dimension (Otjes & Louwerse 2014). The user is then placed within the political space, on the basis of his position on 30 policies. The advice she receives is about her position in the political landscape among the position of parties.

As mentioned above, in the positioning of political parties and users, VAA tools use the logic of Likert scaling (Gemenis 2013). The assumption behind the Likert scales is that each item is an imperfect indicator of the latent concept. By combining the responses on multiple items, the latent concept, ideology or party policy, would be fully captured. Before the increase in VAA research, there was a limited use of Likert scales in measuring parties' positions, most research making use of interval scales to place the parties.

Although it generates large amounts of data at a relatively low cost, VAA data has its flaws. A pertinent flaw is the lack of representativeness, due to the self-selection mechanism through which the users access the tool. I will discuss the statistical adjustments that can be applied to VAA data in the data limitations section.

The additional data used in the analysis, such as country and party level predictors, will be presented in the last section of this chapter, called instrumentation and measures.

3.6 The limitations of VAA-generated data

This section addressed the limitations of VAA data, mainly the lack of representativeness. I will start by presenting the main critiques brought against VAA data, most of them associated with web surveys, such as coverage error, sampling error and non-response rates.

A good survey sample is a representative one. However, survey sampling often

faces selection biases such as under-coverage (or coverage error), non-response bias and voluntary response bias. When under-coverage bias occurs, segments of the population are under-represented in the sample. An historical example is the Literary Digest voter survey that predicted the victory of Alfred London over Franklin Roosevelt in the 1936 presidential elections (Weisberg 2009, Wilson et al. 2011). The bias was a result of convenience sampling, where the low-income voters, who were mostly Democrats, were under-represented in the sample. Non-response bias occurs when respondents are unable or unwilling to take part in the survey, and the non-respondents differ from respondents in meaningful ways, such as income, as it was the case in the Literary Digest example mentioned above. Voluntary samples are biased by their nature, because respondents self-select themselves for the survey. Usually, in voluntary samples individuals with strong opinions are over-sampled, while those who do not have strong opinions about the topic of the survey will be under-sampled.

In voluntary surveys on political topics, those more interested in politics are more likely to participate. As voluntary sample, VAAs suffer from voluntary response bias, with most of the respondents self-selecting themselves into the samples based on their high levels of political interest. While this bias generates major setbacks in terms of the results being representative, it also makes VAA data unique, allowing researchers to address specific questions about the political preferences of those with high levels of interest in politics.

VAA sites attract millions of users, generating large datasets on their political preferences. Additionally, after they receive the vote advice, users can fill out a follow-up questionnaire, which asks for socio-demographic information such as age, gender, occupation, as well as party affiliation. More recently, VAA generated data have been used more and more as a substitute for survey data, in trying to explain political phenomena such as the positioning of parties and voters, as well as voting behavior (Garzia & Marschall 2016). Although extremely cost effective, the use of this type of data is highly controversial, due to the bias that accompanies VAA data. The most important caveat is that the data is not representative of the population at large. More precisely, the data is biased towards the young and better educated (Marschall & Schultze 2012), from urban areas, with a more Left-wing orientation (Mendez & Wheatley 2014). An

additional bias is represented by gender, with two-thirds of the users being male (Wheatley & Germann 2014).

As a web survey tool, the quality of VAA data suffers from an overall survey error, made out of coverage error, sampling error, non-response error and measurement error (Andreadis et al. 2013). Coverage error occurs when part of the population cannot be included in the sample; in the case of VAAs, this is to do with Internet usage, more specifically with the Internet penetration rate and Internet literacy, discussed in the introductory chapter. Sampling error represents the inaccuracy in estimating a certain quantity based on the sample, when the entire population is not available; here, the sampling error has to do with the self-selection bias of people into using the tool. Non-response error occurs when users do not respond to questions, and this pattern can be discerned when compared to the answers of other users. Measurement error occurs when the answers provided by the users are wrong or inaccurate (Andreadis 2014).

Among the survey errors associated with web surveys, the VAA generated data suffers greatly from lack of representativeness due to limited coverage and measurement error, caused by users who are just testing the tool[19], or trying to manipulate the outcome (Andreadis 2014). Alongside self-selection bias into the VAA sample, there is an additional self-selection bias, because not all the VAA users proceed in filling out the follow-up questionnaire. In the 2009 EU Profiler for example, out of the 600.000 users who filled out the application up until they received the VAA recommendation, only 20.000 filled out the extra questionnaire, providing information of socio-demographic and political orientation. The double selection bias brings with it people with higher levels of political interest, who cannot be compared with the population at large.

The lack of a systematic sampling method cautions VAA scholars to draw in-

[19]The free availability of the tool opens the VAA application to anyone with Internet access, allowing users to fill it out more than once, generating random responses. This type of behavior was identified as 'rogue' responses (Djouvas et al. 2014). The rogue responses are due to the fact that VAA tools offer incentives to their users, to record different answers in order to see how the final result is affected, such as the spider output (Djouvas et al. 2014). This behaviour results in over-reporting the number of users; more than that, it affects the inferences drawn from VAA data. Because this type of responses cannot be fully explained as measurement error, there are other ways to 'weed out the rogues' (Djouvas et al. 2014)

ferences from these data. However, the increased popularity of VAAs, together with the large datasets they generate, led researchers to look for solutions to overcome the problem of representativeness. To start with, it is believed that the digital divide becomes smaller, reducing the bias induced by non-coverage. Also, the increased popularity of VAAs suggests that the differences between the VAA users and the general population becomes smaller. However, this assumption stands only for the countries where VAAs are widely known and used, such as Switzerland or the Netherlands. As a solution to this problem, weighting techniques can be used to adjust for the lack of representativeness, together with post-stratification and propensity score matching techniques (Duffy et al. 2005).

Using only the data from the VAA opt-in samples[20] brings a third layer of bias, because those who fill out the extra questionnaire tend to be highly motivated. To date, response latency timers are the most used methods for cleaning VAA data. 2009 EU Profiler and 2014 EUvox data have been cleaned using response latency timers. Also, congruence scores are calculated only for the users who provided socio-demographic information, in addition to their VAA profile.

After delving into the particularities of VAA data and its related limitations, I want to shortly touch upon variation in the sample biases across countries. In the first chapter, while introducing VAAs, I discussed how variation in their usage across countries can be attributed to Internet penetration rates, which are lower in countries from Eastern Europe. In countries with low VAA usage, the expectation is that the biases inherent in VAA data are exacerbated. More precisely, I am referring here to interest in politics and education.

Even if VAA generated data suffers from the bias induced by its users, most of them presenting high levels of political interest and high education, this does not necessarily represent a major setback. There are studies that rely on citizens' placements of parties on the Left-Right dimension that select only the top percent of respondents, focusing on those with high political interest and knowledge. Acknowledging the external validity problems associated with VAA generated data that stem from a lack of representativeness, they remain a powerful resource of generating data on users' political preferences, party affiliation and demographic information. Without any statistical adjustments, the results

[20]The follow-up questionnaire

of the analyses carried out in this thesis have low external validity, and inferences can be made only about the population of VAA users. In the next subsection I will address the modeling strategy used to analyze VAA generated data.

3.7 Modeling strategy

As stated before, one of the contributions this thesis makes lays in its comparative approach. Due to the nesting in the data, a multi-level approach is best suited. The small number of comparative studies on issue congruence have in common the simplicity of the methods used, limited to OLS (Dalton 2017*b*). This approach disregards the variation across countries (Belchior 2013) or even to correlation analysis (Luna & Zechmeister 2005).

Given the nature of the hypotheses and the levels of measurement of the variables included, multilevel analysis is recommended. The multilevel regression is the most popular quantitative approach when one wants to compare and explain differences across countries (Bryan & Jenkins 2013). Multilevel analysis uses data from multiple countries, in which individual data is modeled as a function of both individual level and country level characteristics (Bryan & Jenkins 2013). VAA generated data is individual level data, where individuals are nested within political parties and within countries. Although multivariate regression analysis is suitable for testing the predictors of congruence at the individual level, it cannot capture the characteristics individuals share based on their party affiliation or by being from the same country. Using multilevel modeling, shared characteristics can be accounted for. A more detailed description of the method will proceed within the empirical analysis.

Over seven decades of electoral research helped set some prerequisites for studying political preferences and voting behaviour. In order for the analysis of political preferences to be meaningful, there are certain conditions to be met (Adams 2001*b*). First of all, parties must have distinct policy positions on issues. Second, voters should have crystallized and stable preferences. Third, the voters have to vote according to their preferences. In the 2009 EU Profiler and 2014 EUvox universe of cases the first condition is met, given that the positions of political parties on issues are decided by a team of experts. More than that, in some cases, the positions are checked with the political parties. None of the

available manifesto coding and expert data presents this quality, giving the VAA data a consistent advantage (Garzia et al. 2014). Regarding the second criteria, that voters should have clear political preferences, the VAA tool asks its users to answer a vote intention question. Throughout the thesis, I mention that congruence is assessed as the distance between the voter and the party the user intends to vote for, and sometimes I refer to the party as the user's most preferred party. Although the party reported as vote intention and a voter's most preferred party are not necessarily the same, I argue that the vote intention is closely aligned with the most preferred party.

The so-called 'dependent' variables in electoral studies are the propensity to vote (PTV) and vote choice questions. Propensity to vote for a party and vote choice are two different phenomena. A high propensity score does not necessarily mean that a voter will cast their vote for that party, if we take into account possible strategic considerations the voter faces. However, the electoral behaviour literature treats vote choice and propensity scores interchangeably (Van der Brug & Mughan 2007). In this thesis, I use the vote intention question to identify the user's most preferred party. The congruence score is calculated as the match with the party indicated by the user. In the VAA questionnaire, the vote intention questions use the following wording: 'If you intend to participate, which party would you vote for in the EP elections in June of this year?' in the 2009 EU Profiler and 'In the European elections, which party do you intend to vote for?' in the 2014 EUvox.

3.8 Measuring congruence with VAA data

VAA generated data allows a measurement of congruence as conceptualized by Golder & Stramski (2010), *a many-to-one* type of relationship. Within this type of relationship, congruence can be assessed as *absolute citizen congruence* and as *relative* congruence. The strength of this work lays with the measures of congruence employed, drawing on both positions of the users and of political parties, not solely on the perception of users of party positions. An advance to congruence studies is made by creating a *relative measure* of congruence. As Golder & Stramski (2010) point out, few studies employ a *relative measure*, which allows for cross-country comparisons to be made.

The growing importance of issue preferences in the vote decision studies (Dalton 1996, Franklin et al. 2009) follows Downs' (1957) spatial model, where every policy can be placed on a Left-Right continuum. In order for issue voting to be meaningful, voters need to have clear issue preferences, parties have to compete over the same policy issues (Petrocik & Verba 1979) and voters have to be able to identify their position relative to the position of parties (Butler & Stoke 1974). The VAA generated data meets these conditions, having the parties coded over the same political issues, and aiding the users to identify their positions relative to the position of political parties.

Compared to traditional approaches of measuring congruence, where the respondents are asked to place the parties on the Left-Right scale, the VAA data presents the advantage of capturing the objective position of parties, rather than the perceived ones. The party placements are made by a team of political experts from each country, and in some cases the political parties collaborate with the VAA developers, offering their own position on issues. The citizens are not asked to place themselves alongside a political dimension, they are asked to express policy preferences, from which their position is further assessed. This way, the citizens' positioning is more reliable, compared to an ideological self-placement.

The measures of congruence put forward in this thesis, based on VAA generated data, are the direct counterpart of the *representative deficit*, which was presented in the introductory chapter. The concept of representative deficit illustrates the citizen political preferences that are not mirrored by the policies on offer. Introduced by (Alvarez, Levin, Trechsel & Vassil 2014), the concept is used in recent work that makes use of VAA generated data (Dinas et al. 2014, Bright et al. 2014, Garzia et al. 2014) to look at representation within the boundaries of the European Union.

Similar to *representative deficit*, the measures of congruence developed in this work are calculated using the agreement scores of the VAA user with the party she intends to vote for, as detailed in the methodology developed for the 2009 EU Profiler (Trechsel & Mair 2011). Both the 2009 EU Profiler and the 2014 EUvox comprise a set of 30 statements on policies. 2009 EU Profiler includes 28 statements identical across EU countries, and two country-specific statements. 2014 EUVox incorporates 22 common issue statements, and 8 that vary from

one country to another. Because the aim is a cross-country comparison, I will take into account only common policy statements, for both data sets. In what follows, I will present the two ways of assessing congruence, *the absolute citizen* and *relative* measures, both under the same *many-to-one* approach.

3.8.1 Absolute citizen congruence

Absolute citizen congruence looks at the average absolute distance between party supporters and a party. It takes into account the position of all party supporters, not just the median position. The use of the *median citizen* positions is one of the main critiques brought against the traditional ways of measuring congruence Golder & Stramski (2010). The main argument is that by focusing on the median position, any information about the distribution of citizens' preferences is ignored. Looking at the *absolute citizen congruence* fights against this critique.

As mentioned above, the data incorporates users' position on 28, respectively 22 common statements, as well as the position of parties within each country, on the same political statements. Only the political parties with real chances of winning the elections were included in the VAA tools. The answer options to both the 2009 EU Profiler and 2014 EUVox issue statements are on a 5-point Likert scale: completely agree/tend to agree/neutral/tend to disagree/completely disagree/no opinion. Each answer option has a numerical value attached to it, as follows: 'completely agree' - 100, 'tend to agree' - 75, 'neutral' - 50, 'tend to disagree' - 25, 'completely disagree' - 0. Following (Trechsel & Mair 2011), the agreement score is calculated with the following formula

$$Agreement\ score_i = 100 - |C_i - P_i|$$

where $Agreement\ score_i$ stands for agreement score on issue i, C_i stands for citizen position on issue i, and P_i stands for party position on issue i. Congruence takes values between 0 and 100, where 100 means perfect congruence.[21]

In computing the congruence score at individual level, only user's most preferred

[21]Due to data limitations, not all EU countries were included in the analysis. For *absolute citizen* congruence (assessed at individual level), the minimum number of respondents from a country is 400. Additionally, for *relative congruence* (assessed at party level), the minimum number of party supporters is 30

party[22] is considered. Accordingly, each user has a total of 28 agreement scores with the party she intends to vote for in the 2009 EU Profiler data, respectively 22 in the 2014 EUVox data.

As emphasized in the introductory chapter, one of the contributions this thesis brings is the focus on issue dimensions. More than looking at individual issues, I will compile issues into issue dimensions, such as *Economy*, *Social* and *EU*. The issue dimensions follow the structure created by VAA developers. The score per issue dimension is computed by averaging across the issues belonging to that specific dimension. Accordingly, each individual will have three measures of congruence, one for each issue area, in an addition to an *overall* congruence score, that can be thought of as the equivalent of ideological congruence, since it does reflect the agreement over a diverse range of issues.

Because *absolute citizen congruence* is assessed at an individual level, it can be aggregated at the party and country level. A general congruence score for each country is obtained by averaging across the scores for each issue dimension. In the next section, I will present an alternative measure, *relative congruence*, which according to Golder & Stramski (2007) is superior, because it takes into account the distribution of citizens' preferences.

3.8.2 Relative congruence

Because it follows the same approach, *many-to-one* congruence and *relative measure* congruence is similar to *absolute citizen* congruence. What differentiates between the two is that the *relative* measure takes into account the distribution of citizens' preferences, in this case of the entire base of party supporters. This measure is assessed at a party level. Following Golder & Stramski (2010), under this approach congruence is measured as follows:

$$Agreement\ score_i = 1 - \frac{\sum |C_i - C_{iMedian}|}{\sum |C_i - P_i|}$$

where $Agreement\ score_i$ stands for agreement score on issue i for a party, C_i stands for citizen's position on issue i, $C_{IMedian}$ stands for the median citizen position on issue i and P_i stands for the party position on issue i. Congruence takes on values between 0 and 1, where 1 represents perfect congruence.

[22] Listed as vote intention

Because *relative congruence* scores are under decimal format, while *absolute citizen* congruence takes values between 0 and 100, the *relative measure* requires some transformations, that will make the two measures comparable and the results easier to interpret. Accordingly, the *relative measure* becomes

$$Agreement\ score_i = 100 - |(1 - \frac{\sum |C_i - C_{iMedian}|}{\sum |C_i - P_i|}) * 100|$$

As with the previous method of assessing congruence, I will compute scores for each of the three issue dimensions, *Economy*, *Social* and *EU*, by aggregating the values of the issues that form the dimension.

Because the *relative measure* of congruence takes into account the distribution of the entire base of party supporters, the expectation is that relative congruence scores for niche parties will be higher than *absolute citizen congruence* scores. The distribution of preferences will vary less for niche, compared to mainstream parties. The two ways of assessing congruence, *the absolute citizen* and *the relative* congruence can be compared at the party and country level. The decision to use both measures of congruence was partly based on Golder & Stramski's (2007) results, who showed that different conceptualizations of citizen-representative congruence lead to different empirical results.

3.9 Issue dimensions

As previously emphasized, the main advantage of VAA data is that it measures citizens and parties measured on the same scale, on the same policy issues. The 28, respectively 22 issues can be compiled into issue categories, following the dimensions set by the developers of the two VAAs. The dimensions are the *Economy, Social* and the *EU*. Below I present the list of issues that load on each issue dimension, for both data sets.

	2009 EU Profiler: EU issue dimension
Issue 1	European integration is a good thing
Issue 2	Individual member states of the EU should have less veto power
Issue 3	The European Union should strengthen its security and defence policy
Issue 4	The European Parliament should be given more power
Issue 5	Any new European Treaty should be subject to approval in a referendum in the *country*

Issue 6	On foreign policy issues, such as the relationship with Russia, the EU should speak with one voice
Issue 7	*country* is much better off in the EU than outside it
Issue 8	The European Union should be enlarged to include Turkey
	2009 EU Profiler: Economy issue dimension
Issue 9	Greater efforts should be made to privatize health care services in the UK
Issue 10	Social programmes should be maintained even at the cost of higher taxes
Issue 11	State subsidies for crèches and child care should be increased substantially
Issue 12	Governments should reduce workers' protection regulations in order to fight unemployment
Issue 13	Governments should bail out failing banks with public money
Issue 14	The EU should acquire its own tax-raising powers
Issue 15	The EU should drastically reduce its subsidies to Europe's farmers
Issue 16	The top rate of income tax should be reduced further
Issue 17	The state should intervene as little as possible in the economy
	2009 EU Profiler: Social issue dimension
Issue 18	Immigrants from outside Europe should be required to accept our culture and values
Issue 19	Criminals should be punished more severely
Issue 20	Restrictions of civil liberties should be accepted in the fight against terrorism
Issue 21	Policies to fight global warming should be encouraged even if it hampers economic growth or employment
Issue 22	The legalization of same sex marriages is a good thing
Issue 23	Euthanasia should be legalized
Issue 24	The decriminalization of the personal use of soft drugs is to be welcomed
Issue 25	Immigration policies oriented towards skilled workers should be encouraged as a means of fostering economic growth

Issue 26 Religious values and principles should be shown greater respect in politics

Issue 27 The promotion of public transport should be fostered through green taxes (e.g. road taxing

Issue 28 Renewable sources of energy (e.g. solar or wind energy) should be supported even if this means higher energy costs

The policy issues from the 2009 EU Profiler were divided across three categories, *Economy, Social* and *EU*. Figure 4 illustrates the way issues (more precisely agreement on issues assessed at individual level) are compiled into issue categories, but also the way in which congruence scores at the party and country level are obtained.

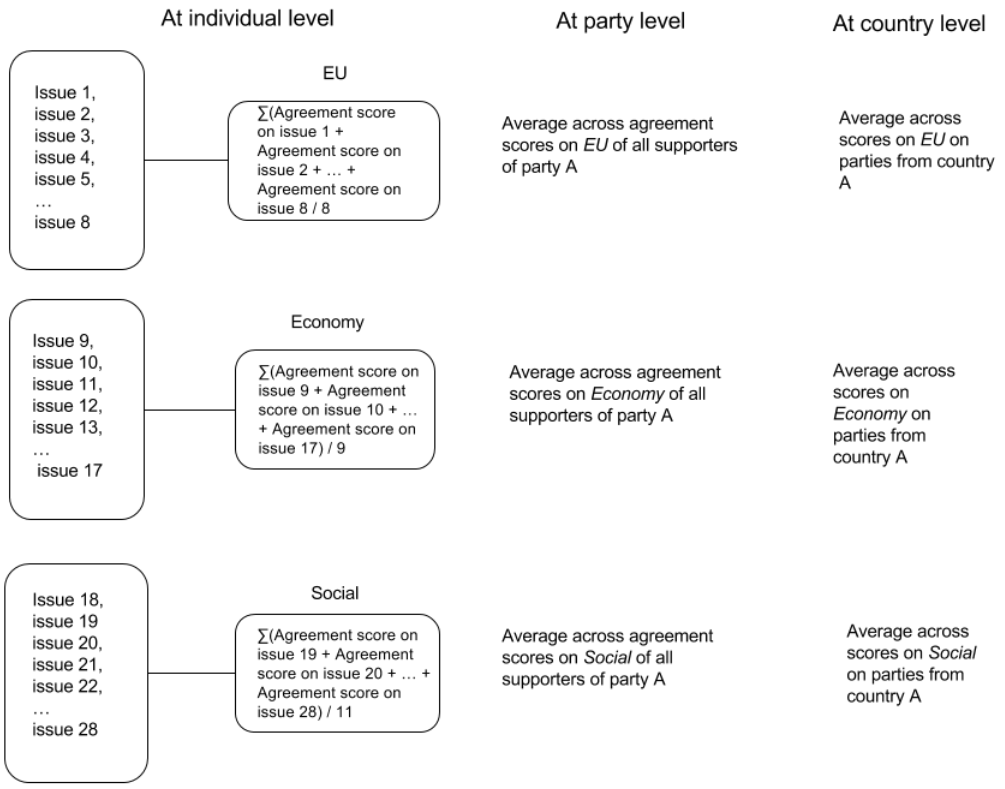

Figure 4: Structure of congruence scores at individual, party and country level, 2009 EU Profiler

2014 EUvox had 7 issue dimensions, which have been compiled into categories, *Economy, Social* and *EU*, to allow for comparisons between the two time points. Below is the list of issues included in the 2014 EUvox, grouped into issue dimen-

sions.

	2014 EUvox: EU issue dimension
Issue 1	A single member state should be able to block a treaty change, even if all the other members states agree to it
Issue 2	There should be a common EU foreign policy even if this limits the capacity of *country* to act independently
Issue 3	The right of EU citizens to work in *country* should be restricted
Issue 4	EU treaties should be decided by *country* rather than by citizens in a referendum
Issue 5	*country* should never adopt the Euro/ should leave the Euro
Issue 6	Overall, EU membership has been a bad thing for *country*
Issue 7	The EU should redistribute resources from richer to poorer EU regions
	2014 EUvox: Economy issue dimension
Issue 8	Free market competition makes the health care system function better
Issue 9	The number of public sector employees should be reduced
Issue 10	Wealth should be redistributed from the richest people to the poorest
Issue 11	The state should intervene as little as possible in the economy
Issue 12	Cutting government spending is a good way to solve the economic crisis
Issue 13	External loans from institutions such as the IMF are a good solution to crisis situations
Issue 14	It should be easy for companies to fire people
	2014 EUvox: Social issue dimension
Issue 15	The recreational use of cannabis should be legal
Issue 16	Women should be free to decide on matters of abortion
Issue 17	Same sex couples should enjoy the same rights as heterosexual couples to marry
Issue 18	Less serious crimes should be punished with community service, not imprisonment
Issue 19	To maintain public order, governments should be able to restrict demonstrations
Issue 20	Immigrants must adapt to the values and culture of *country*
Issue 21	Restrictions on citizen privacy are acceptable in order to combat crime

Figure 5 illustrates how congruence scores at individual, party and country level were obtained, with the help of 2014 EUvox data.

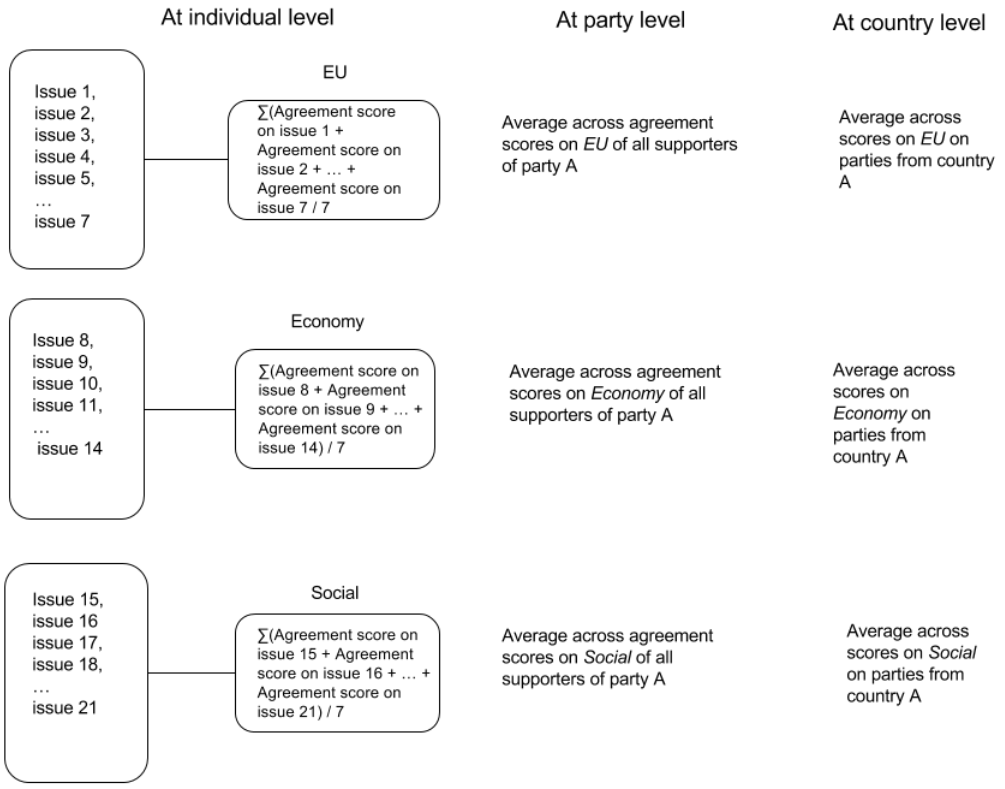

Figure 5: Structure of congruence scores at individual, party and country level, 2014 EUvox

3.10 Instrumentation and measures

This section introduces the operationalization of the predictors of congruence. Operationalization involves, but is not limited to: the disproportionality of the electoral system, the degree of fragmentation, polarization, district magnitude, old/new democracy, mainstream/niche party differentiation, governmental status, election cycle, followed by political interest, self-placement on the Left-Right scale and socio-demographic characteristics. In what follows, I will present the predictors used for testing congruence, starting with features of the electoral system, party type and individual level predictors.

3.10.1 Country level predictors: election rules and party system characteristics

At a country level, the predictors of congruence can be divided between election rules and characteristics of the party system. The election rules I will test in relationship with congruence are the disproportionality of the electoral system and district magnitude. The party system characteristics tested polarization, the effective number of parties and the old/new democracy dichotomy. The reasoning behind the use of these predictors was discussed in chapter two. In this section I will focus solely on presenting the instruments and their operationalization.

The disproportionality of the electoral system

The proportionality, or more precisely the disproportionality of the electoral system is assessed using the Gallagher Index (Gallagher 1991). The index is useful for comparing proportionality across electoral systems. Also called the least square index, the Gallagher Index takes the difference between the percentage of votes received and the percentage of seats a party gets in the legislature and is calculated using the following formula:

$$LSq = \sqrt{\frac{1}{2}\sum_{i=1}^{n}(V_i - S_i)^2}$$

The scores range from 0 to 100, where a lower value indicates low disproportionality, and an higher value indicates high disproportionality (Gallagher & Mitchell 2005).

District magnitude

District magnitude is drawn from the World Bank Political Institutions database, where the measure is available by year.

Party system fractionalization (EFNP)

Another element which can be used to describe and compare party systems is fractionalization, or the effective number of parties (EFNP). The idea behind the measure of fractionalization is that the universe of party systems sizes is not continuous and there is a need for a continuous measure that would help to identify different classes of party systems (Caulier & Dumont 2005).

An alternative to the the Herfindahl-Hirschman index, and the most used tool in comparative research on party systems, is the measure developed by Laakso & Taagepera (1979). It is the inverse of the Herfindahl-Hirschman index and simply put, it counts the number of parties weighted by their size, to account for the reduced relevance of the small parties. The main advantage this method holds over the previous indexes is that it can be interpreted as 'the number of equal-sized parties to which the unequal-sized parties is equivalent' (Golosov 2009). The Laakso and Taagepera index weights the parties according to their own size, giving larger weights to larger parties, therefore making it possible to discount the small parties. The Herhindahl-Hirschman and Laakso and Taagepera indexes are used interchangeably, and as Dalton (2008) points out, for the elections included in the CSES database textit(N = 62), the two scores are highly correlated, at r = *.92*.

Another way to look at the fractionalization is following Rae's F index, computed as:

$$F = 1 - \sum(s_i)^2$$

where s_i is the proportion of parliamentary seats of party i, and P is the summation of all parties' squared proportions of seats, subtracted from 1, to provide the fractionalization of parties. A value close to 1 indicates high fractionalization. In a system where one party gets all the seats (a proportion of 1) the index will point to 0 (Caulier & Dumont 2005). This measure is useful in cross-country comparisons of electoral systems. The effective number of parties equals the number of parties only when the parties have equal strength; otherwise, the effective number of parties is always lower than the actual number of political parties in a party system (Laakso & Taagepera 1979). To account for the number of parties, I will rely on Laakso & Taagepera's (1979) measure, employed by Gallagher & Mitchell (2005).

Polarization

The measure of polarization is borrowed from Dalton (2008). The index measures the distribution of the parties along the Left-Right scale, and is computed as:

$$P = \sqrt{\sum_{i=1}^{n} v_1(\frac{p_i - \bar{p}}{5})^2} \quad (2)$$

where i represents individual parties. The index is comparable to a measure of a standard deviation of a distribution. It has value of 0 when all the parties are situated at the exact same position on the Left-Right scale and 10 when the parties are split between the two ends of the continuum (Dalton 2008) [23]. Although there is variability over time, most systems are fairly stable in regards to their polarization scores.

Old/new democracy

The last predictor under the country level category is the old/new democracy dichotomy. Countries with a long democratic experience are coded as 1, while those from the third wave of democratization are coded as 0. The World's Bank Political Institutions database contains a record of the years since a country became democratic, which was the information I used to create the old/new democracy variable.

3.10.2 Party level predictors

The second level of analysis focuses on party level predictors, namely the ideological leaning of a party, the niche/mainstream party dichotomy and governmental status, taking into account the election cycle.

Niche/mainstream parties

The first and most important differentiation is between niche and mainstream parties. Following Meguid (2005), niche parties emphasize a limited number of issues, that are usually neglected by the mainstream parties. The operationalization of niche parties is restricted to Green, radical-right/nationalist, Communist and ethno-territorial party families. Another important characteristic that helps to discern between niche and mainstream parties is the salience of economic issues, or the absolute lack of it for niche parties (Meyer & Wagner 2013). I will use Meguid's (2005), who used expert surveys to classify the parties into niche and mainstream parties, and Wagner (2012) classifications.

Governmental status

[23] For the countries not included in Dalton's (2008) study, the scores were borrowed from studies employing similar measures (Italy, Estonia, Greece, Slovakia from ECPR paper https://ecpr.eu/Filestore/PaperProposal/c588a466-ecdd-48f4-a127-dfc5db37f909.pdf)

The concept of governmental status follows the conceptualization offered by Janda (1980), where governmental status refers to the nature of extent of a party's participation in national politics. A party has high governmental status when it enjoys government favour rather than interference, when it claims identification with the chief executive of the parliament, when it holds cabinet positions, holds a majority of the votes in the national legislature and benefits from strong support in elections (Janda 1980, p. 29).

The election cycle (Reif 1984) variable is computed using the number of days between the last national election and the European election, as well as the distance between the national elections, using the following formula:

$$Election\ cycle = \frac{NE_1 - EE}{NE_1 - NE_2}$$

If the election cycle is 1, the national election and the European elections are on the same day, a value of 0.5 indicates the middle of the electoral cycle and a value of 0 indicates a very new electoral cycle.

The last predictor at party level is ideological leaning, where the parties are divided across Left, centre and Right.

3.10.3 Individual level predictors

The third level of analysis focuses on individual characteristics as predictors of issue congruence, such as age, gender, educational attainment, interest in politics and self-positioning on the Left-Right scale.[24] Age is divided into five categories (18-29, 30-49, 50-64, and above 65 years old). Education is measured into primary, lower secondary, upper secondary, post-secondary non-tertiary, first stage of tertiary education and second stage of tertiary education. Interest in politics is measured on a four-point scale (a little, somewhat, very, not at all interested). I recoded self-placement of the Left-Right scale into a variable that illustrates whether the voter places herself towards the end of the ideological spectrum, denoting extremism. Self-placement on the Left-Right scale was assessed on a 11 point scale (0 Left, 10 Right). After recoding, the new variable takes 6 values (where 0 denotes a non-extreme position, and 5 an extreme position).

[24]This measure is available only in the 2009 EU Profiler data set

This chapter presented the research design of the thesis. The theoretical underpinnings of congruence were introduced and discussed in the previous two chapters; in this chapter, I presented different approaches to measure congruence, making a case for the use of VAA data and the *absolute citizen* and *relative* measures. I discussed the role of European Parliamentary elections, the levels of analysis, data sources, and the modeling strategy. Next, I explained how the *absolute citizen* and *relative* measures of congruence are computed, how the scores for issue domains are obtained, as well as party and country level scores, followed by preliminary results. The chapter ends with the operationalization of the variables to be used in the empirical chapters.

The aim of this study is to investigate the relationship between institutional designs, party and individual level characteristics and political representation, understood as congruence. Although the effect of electoral systems on the number of parties, vote-seat-disproportionality, ideological congruence and social representation is a well researched topic, there is no consensus in the literature on what helps to explain congruence. There are three major points in representation studies related to the use of the Left-Right that I will address in the empirical chapters of this thesis.

First of all, the match between voters and representatives is inferred from alternative interpretations of congruence. By matching I refer to proximity, or congruence, which is most widely used. In most cases, congruence is assessed on the Left-Right dimension, which brings up a series of substantive setbacks. The most common conceptualization of congruence, using the Left-Right dimension, requires an intensive ideological exercise on the users' part, where they have to place themselves on this continuum. Taking this aspect a bit further, comparing citizens and political actors raises a series of methodological problems.

Second, the results of users' self-placement on an ideological scale can differ from those using positioning on substantive policy issues (Belchior 2013). Furthermore, it has been shown that high correlations between citizens and MPs do not translate automatically into greater proximity, used as congruence (Bingham Powell Jr 2009).

Third, the Left-Right positioning says little about the meaning of the positions.

Although there are empirical studies that analyze the levels of congruence across European parties in a comparative manner, most of this work is descriptive (Belchior 2013). The meaning of Left and Right is different across countries, amplifying the problem when the results are used in cross-country comparisons (Benoit & Laver 2006).

The present study tries to address and overcome some of these setbacks. Because cross-country comparisons cannot be made when the Left-Right issue dimension is not perceived similarly across countries. Employing a set of issue policies that are common across EU countries significantly reduces the problem. The result is a metric-free concept of congruence, as inspired by the work of Golder & Stramski (2010). By focusing on issue congruence, the use of the abstract Left-Right scale and its shortcomings are avoided. Furthermore, I address the debate initiated by Golder & Stramski (2010), who argue in favor of a *relative* measure of congruence, that takes into account the distribution of citizens' preferences, instead of focusing only the median citizen. As detailed in the previous chapter, I employ both an *absolute citizen* and a *relative* measure of congruence.

As pinpointed in the theoretical chapter, the empirical part of this thesis focuses on three levels of analysis. First, congruence is tested against country level predictors. Second, the focus moves to party level predictors. Third, individual level predictors are tested in relation to congruence. I employ two measures of congruence, an *absolute citizen* and a *relative* measure. *Absolute citizen* congruence is tested against predictors at all three levels of analysis (country, party and individual). *Relative* congruence is tested only against predictors at a country and party level. *Relative congruence* scores are calculated at a party level, then aggregated at country level. *Absolute citizen congruence* scores are computed at individual level and then aggregated at a party and country level.

4 Congruence under different institutional designs

In terms of electoral rules, most studies predict that party-voter congruence will be higher in proportional systems than in majoritarian ones.[...] There are reasons to believe, however, that the story is more complicated than this. - Golder & Ferland (2017)

4.1 Introduction

Most studies on political representation argue that PR systems, with a large number of political parties and high district magnitude perform better in terms of the degrees of congruence between citizens and their representatives. The vast majority of studies focus on one or a small number of cases. Therefore, few studies offer a comparative perspective on this issue (Belchior 2013). This analysis contributes to the stream of research on political representation understood as congruence, offering two snapshots at the quality of democratic representation in EU countries, from 2009 and 2014. By institutional designs I am referring to a political system's characteristics, such as the number of parties, polarization, size of electoral districts, proportionality of the electoral system and democratic experience.

A longstanding consensus in representation studies supports the view that PR systems produce more congruence between the citizens and their representatives compared to majoritarian systems (Huber & Powell 1994, Powell 2000, 2006). This stream of literature uses vote-seat disproportionality as a measure of political representation, and in most cases, the absolute distance between the median citizen and the government (Golder & Stramski 2010). Golder & Stramski (2010) propose the use of a direct counterpart measure of ideological congruence, namely *relative congruence*.

The idea behind Golder & Stramski's (2010) measure of relative congruence is that it portrays the presence of a legislature that 'accurately reflects the ideological preferences of the citizenry as a whole'. Furthermore, they argue that the results depend greatly on the conceptualization and measure of congruence used. While congruence assessed as vote-seat proportionality captures how accurately the votes translate into seats in the legislature, Golder & Stramski's (2010) measure captures how accurately the underlying ideological preferences of voters are translated into seats. As discussed in the previous chapter, the measures of congruence proposed in this thesis capture how accurately the underlying issue preferences of voters are matched to those of the party the user intends to vote for.

By employing the new measure of relative congruence, Golder & Stramski (2010) argue that in contrast with the consensus in the literature, PR systems do not hold a substantive advantage in representing their citizens, over majoritarian systems. However, PR systems are characterized by more congruent legislatures (Golder & Stramski 2010, p.91). Arguing that the varying results are due to various measures of congruence employed, they suggest that it is extremely important for scholars to justify the conceptualization and measurement of the congruence, or to demonstrate more robust results compared to alternative measures (Golder & Stramski 2010, p.103). Following this line of thought, employing a new measure of congruence, besides detailed explanations and justifications of the method used, requires testing and comparison to traditional methods, considered the norm. For this reason, I use both an *absolute citizen* and a *relative* measure of congruence.[25]

4.1.1 Hypotheses

In chapter two of the thesis I engaged with a theoretical approach to the study of issue congruence. After reviewing the relevant work on the topic, I developed five working hypotheses, centered on party system fractionalization, disproportionality, district magnitude, polarization and the old/new democracy dichotomy.

[25]Even though the measure of congruence developed by Golder & Stramski's (2010) looks at the distance between citizens and governments, while the measures of congruence developed in this thesis focus on the match between citizens and parties, the rationale stays the same

H1: Countries with a more fragmented electoral system present higher levels of congruence [26] *between citizens and their representatives.*

H2: Countries with a more proportional electoral system present higher levels of congruence.

H3: Countries with larger district magnitudes present higher levels of congruence.

H4: Countries with higher polarization present higher levels of congruence.

H5: Old democracies of Western Europe present higher levels of congruence compared to the post-communist democracies of Eastern Europe.

4.1.2 Data

Data from the 2009 EU Profiler and 2014 EUvox are used for testing the predictors of congruence in the pan-European space. The same hypotheses are tested on both datasets. Due to data constraints, the final 2009 EU Profiler dataset includes 11 countries[27], while the 2014 EUvox data set contains 24 countries. As discussed in the previous chapter, the main caveat of using VAA data lays in the lack of representativeness. The results cannot be extrapolated to the entire EU population, being restricted to VAA users, who tend to be young, better educated and more interested in politics. As a consequence of non-representativeness, comparisons between 2009 EU Profiler data and 2014 EUvox data have to be treated with caution. Acknowledging these caveats[28], VAA data still offer an insightful overview of the political preferences of VAA users and the match with political parties. Even though it is unrepresentative of the whole population, the VAA tool reaches people whose opinions are not captured by national or cross-national surveys.

As stated in the beginning of the chapter, the vast majority of studies on political representation use the Left-Right dimension to assess congruence, which generates certain setbacks. Additional problems arise when comparing countries, given

[26] By congruence I am referring to both *absolute citizen* and *relative* measures of congruence

[27] Belgium is split between Flanders and Wallonia

[28] While discussing the limitations of VAA data, I mentioned post-stratification techniques which could alleviate the problem of non-representativeness; however, due to data limitations (the fact that some demographic cells do not have enough respondents), without limiting the number of countries to an extremely small one, post-stratification is not feasible

that the Left-Right dimension has no fixed definition on its substantive content, its meaning changes across countries (Benoit & Laver 2006). The present study tackles this problem, by employing two measures of congruence based on a series of 28 substantive policy issues (22 for 2014 EUvox), identical across European countries. Even if it does not solve the problem entirely, the measure of congruence obtained by employing VAA generated data reduces the ambiguity of the Left-Right dimension. While the Left-Right dimension comprises elements of economic and social policies, the statements of the VAA tool cover a wider area of issues, encompassing GAL-TAN attitudes in addition to socio-economic ones. Issues are divided across *Economy*, *Social* and *EU*.[29]

4.2 2009 EU Profiler data

As mentioned throughout the thesis, the vast literature on political representation has shown, most often, that PR systems, with a large number of political parties, and high district magnitude perform better in terms of representing their citizens. I will put these arguments to the test, employing an *absolute citizen* and a *relative* measure of congruence.

I start the analysis by portraying congruence in the countries under study. As thoroughly explained in chapter three, the measures of congruence employed in this thesis are issue based, ranging from 0 to 100, where 100 means perfect agreement with the party the user intends to vote for in the elections to the European Parliament of 2009 and 2014.

As emphasized in the introductory chapter, besides employing issue congruence, the other contribution this thesis makes is the use of issue areas. [30] The issue policies are compiled into three categories, *Economy*, *Social* and *EU*. The *Overall* measure of congruence[31], is an average across these three issue areas. The reason I am using this measure is to show that by discarding issue areas and focusing on just one aggregated measure, we throw away information. Even by looking at

[29] A comprehensive list of the issues assigned to each category can be found in the **Issue dimensions** section of chapter three

[30] Also referred to as issue categories, or issue dimensions. Dalton (1985, 2017*b*) refers to them as issue domains

[31] The *overall* measure can be thought of as the equivalent of ideological congruence, assessed with the help of the Left-Right dimension, which supposedly encompasses a wide range of issues

Table 4: 2009 EU Profiler - Country level congruence scores

	Absolute citizen congruence				**Relative congruence**				
Country	Overall	Economy	Social	EU	Overall	Economy	Social	EU	*N*
Belgium Fr	71.84	67.96	71.14	77.86	85.00	83.25	83.50	88.25	*1192*
Belgium Nl	75.85	73.90	79.99	78.15	85.56	84.22	88.22	84.22	*361*
England	72.80	74.59	74.17	68.70	84.56	83.50	88.33	81.83	*451*
France	75.13	74.26	71.53	78.54	80.87	79.08	83.31	80.23	*931*
Germany	66.64	65.89	55.88	71.05	83.03	81.40	85.60	82.10	*1174*
Italy	74.77	74.28	64.36	79.16	82.25	82.38	83.25	81.13	*756*
Netherlands	75.83	75.69	80.12	73.93	83.48	84.73	85.73	80.00	*2604*
Poland	71.96	70.05	62.59	78.78	79.90	77.57	75.29	86.86	*534*
Portugal	70.09	70.05	71.45	69.98	77.70	75.78	76.00	81.33	*924*
Spain	77.66	75.58	82.46	79.30	87.07	83.56	89.00	88.67	*651*
Sweden	71.22	75.37	68.04	68.58	85.44	87.22	87.89	81.22	*1828*
Mean	72.9	72.8	71.4	74.1	83.0	81.9	84.3	82.8	
Standard deviation	8.86	10.94	19.63	13.9	7.67	8.88	12.28	9.47	

Absolute citizen congruence is assessed at individual level; Relative congruence is assessed at party level

Source: 2009 EU Profiler

congruence scores, one can see that they vary by issue area. As Dalton (1985) argues, we need to use a multidimensional approach of congruence.

The two snapshots of issue congruence, assessed in 2009 and 2014 show slight variation across EU countries. [32] It is this variation that I will focus on. The goal is to examine cross-national variation in congruence levels. The vast literature on political representation suggests that there are a number of systemic[33], political and social factors that can impact congruence. Additionally, their associated hypotheses were presented at the beginning of this chapter.

[32]See Table 4 on page 112 for congruence assessed in 2009 and Table 8 on page 125 for congruence assessed in 2014

[33]Table 5 on page 113 presents the country level indicators used as predictors. District magnitude comes from the World Bank Political Institution database (Cruz et al. 2016), EFNP and disproportionality comes from the Election Indices developed by Gallagher & Mitchell (2005), and the polarization measures are borrowed from Dalton (2008). The same sources are used to assess the predictors in 2014; see Table 9 on page 126.

Table 5: Country level predictors - 2009

Country	EFNP	LSq	Polarization	District magnitude	Old democracy
Belgium Fr	7.82	4.09	4.09	13.63	1
Belgium Nl	7.82	4.09	4.09	13.63	1
England	3.84	5.09	2.37	9.20	0
France	2.49	13.58	4.33	1.00	1
Germany	4.83	3.40	3.63	1.90	1
Italy	3.07	5.73	3.89	22.50	1
Netherlands	6.97	0.81	3.73	8.30	1
Poland	3.13	5.96	3.22	11.20	0
Portugal	2.93	5.63	3.19	10.50	0
Spain	4.54	1.25	4.58	11.60	1
Sweden	2.57	15.10	4.62	1.00	1

Note: EFNP = Effective number of parties, LSq = Disproportionality

4.3 2009 EU Profiler data - *Absolute citizen congruence*

4.3.1 Preliminary findings - 2009 EU Profiler data *Absolute citizen congruence*

Figure 6 presents the associations between country level predictors and congruence, assessed as an *absolute citizen* measure. Used as preliminary hypothesis testing, the correlation plots suggest that there is a positive association between congruence and the effective number of parties, polarization and old democracy. Although most congruence studies use a majoritarian/proportional representation dichotomy, the low number of majoritarian systems in the data prevents me from doing so. Alternatively, following Golder & Stramski's (2010) suggestion, I measure electoral systems along a disproportionality continuum. The associations between the disproportionality of the electoral system suggests a moderate negative relationship. Similarly, an increase in district magnitude is associated with a decrease in congruence scores.

One of the potential causes of large standard errors is the small number of cases. To be able to compare across the two measures (*absolute citizen* and *relative* congruence), *absolute citizen* congruence scores, assessed at individual level, were compiled into congruence scores at a party level. However, the association plots suggest that between the values of 70 and 75, where most values of congruence

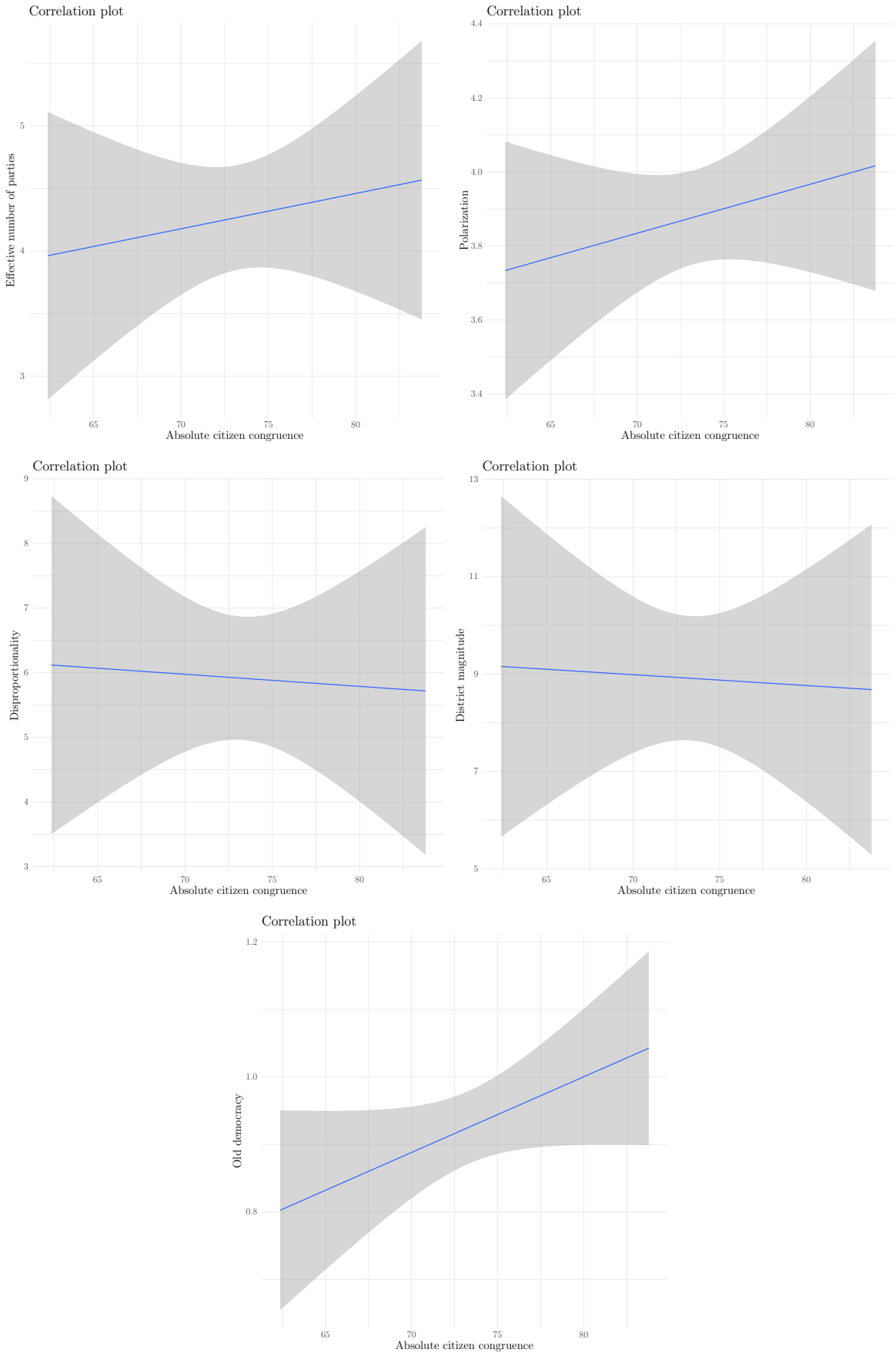

Figure 6: Correlation plots - EU Profiler Absolute citizen congruence - Overall

are clustered, the error is smaller.

I made the case to use multilevel modeling in the previous chapter, but I will outline the reasoning behind it: a complete pooling linear model would have congruence predicted as a function of country level predictors, ignoring the variation in congruence scores across parties. At the opposite pole, a no-pooling model, in which a separate model is fitted for each country, would overstate the variation between countries (Gelman & Hill 2007). The problem of variability across countries is given by the different number of observations per country, which would make the estimates unreliable. A solution to this dilemma is represented by a multilevel framework. In order to test the hypotheses, multilevel analysis will be carried out. The structure of the data requires hierarchical modeling, with individuals nested under countries. The predictors of congruence are tested using a linear mixed effects model, according to the following formula:

$$\begin{aligned} y_{ijk} = \alpha_{ijk} + \beta_1 EFNP_k + \beta_2 Disproportionality_k + \beta_3 DistrictMagnitude_k \\ + \beta_4 Polarization_k + \beta_5 OldDemocracy_k + \epsilon_i \end{aligned} \tag{3}$$

and

$$\alpha_k = \mu_\alpha + \eta_k$$

Linear mixed effects regression analysis [34] was conducted to examine the relationship between *absolute citizen congruence* and theoretical predictors. To account for nesting in the data, with parties being nested under countries, the regression models include a random component for country intercepts (see Equation 3). There are four regression models, *Overall.c.*[35], *Economy.c*, *Social.c* and *EU.c* The response variable of the first model, *Overall*, is an average of congruence scores across the issue dimensions, while the other three models have as response variables congruence scores on *Economy*, *Social* and *EU* issue areas. Originally assessed at an individual level, *absolute citizen congruence* scores are compiled into party scores that vary from 0 to 100. The hierarchical models account for

[34] The models are fitted with restricted maximum likelihood (REML), using the *lmer* package in R. The linear mixed-effects models are built from the baseline model, then extended to include polarization, LSq, district magnitude, effective number of parties and old/new democracy

[35] The '.c' indicates the level of measurement of the predictors used in the model, in this case country level

the fact that the observations within the same country are not independent of each other.

Figure 7 shows the distribution of *absolute citizen* and *relative congruence* scores per issue area. The *Social* issue area has the most dispersed values, while *Economy* has the most dense ones. The pattern is similar for both measures of congruence.

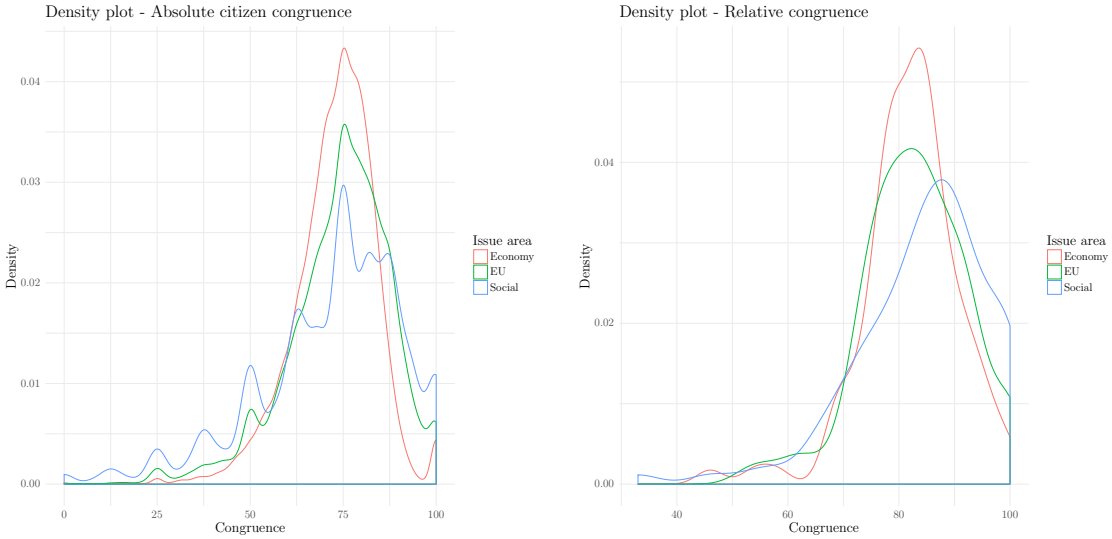

Figure 7: Density plots - EU Profiler

The decision to run models with *absolute citizen congruence* on each issue category as response variable is based on the variation in congruence scores across issue areas. [36] [37]Following Dalton (1985, 2017*b*) congruence varies from one issue domain to another. Consequently, it is expected that congruence predictors will have varying effects on different issue dimensions. For example, that the new democracies of Central and Eastern Europe will present less congruence on the

[36]The variation can be observed in Figure 7, in the Appendices, page 116

[37]I tested for the variation in congruence scores across issue areas using the *Asymptotic test for the equality of coefficients of variation from k populations* (Feltz & Miller 1996) and the *Modified signed-likelihood ratio test (SLRT) for equality of CVs* (Krishnamoorthy & Lee 2014), within the *cvequality* R package. These tests are used for testing whether there is a difference in variation and are based on the coefficient of variation statistic. It is also known as a relative standard deviation coefficient, and it is defined as standard deviation divided by the mean (Feltz & Miller 1996). As can be seen in Tables 20 and 22 on page 233 of the Appendix, the low p-values suggest that the variation across the different issue dimensions is not due to chance.

Social issue area, compared to the advanced democracies of the West.

4.3.2 Results - EU Profiler data *Absolute citizen congruence*

Table 6: Absolute citizen congruence EU Profile

	Dependent variable:			
	Absolute citizen congruence			
	Overall	Economy	Social	EU
EFNP	−0.01	−0.78	0.90	1.48
	(0.98)	(0.70)	(2.54)	(1.80)
Polarization	0.22	0.10	−0.22	1.24
	(0.86)	(0.60)	(2.24)	(1.60)
LSq	0.06	−0.78	−0.24	1.66
	(1.18)	(0.80)	(3.14)	(2.22)
Old democracy	2.58	6.90***	6.04	−5.48
	(2.96)	(2.20)	(7.54)	(5.46)
District magnitude	−0.02	−0.38	−1.40	1.00
	(0.90)	(0.64)	(2.30)	(1.66)
Constant	70.80***	66.74***	67.10***	78.88***
	(2.84)	(2.08)	(7.28)	(5.26)
Observations	93	93	88	90
Random variance	4.24	0	32.22	15.48
Residual variance	69.2	26.0	70.87	48.05
ICC	0.20	0	0.30	0.24
Log Likelihood	−260.441	−276.894	−306.180	−296.493
Akaike Inf. Crit.	536.881	569.787	628.360	608.985
Bayesian Inf. Crit.	557.142	590.048	648.179	628.984
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 6 presents the results of linear mixed effects models with *absolute citizen congruence* as a dependent variable and polarization, effective number of parties, disproportionality, district magnitude and old/new democracy as predictors. [38]

[38]The independent variables were centered at their grand mean, because they are third level predictors. What this means is subtracting from each group's mean the mean of all means. In

The estimates for hypotheses *H1, H3, H4* and *H5*, testing for the effect of the number of parties[39], district magnitude, polarization and old democracy, take values in the right direction, but due to the large standard errors we can have little confidence in the direction of the relationships. Exception makes *H5*, where old democracy present higher levels of congruence compared to new denocracies. The results reach the traditional treshold of statistical significance only in the *Economy.c* model. Figure 41 on page 233 presents the marginal effects plots of the models presented above, and show that the effects are not consistent across the models. The lack of significant findings is consistent with the results of previous work (Belchior 2013).

The low intra-class correlation coefficient (ICC) of the *EU.c* model indicates that as we move from one country to another, individuals do not differ much, in terms of being congruent with their most preferred party. If we look at the *Economy* and *Social* issue area, we can notice a bit more variation across countries. Table 27 on page 235 of the Appendices presents the ICCs of baseline models for each of the mixed effects models in Table 6. Even though the data does not support the hypotheses, looking at the difference between the ICC of the baseline models and the models with system level predictors, one can see that once country level predictors are accounted for, ICC increases. In other words, controlling for country level predictors such as polarization, district magnitude, disproportionality, number of political parties and the status as an old/new democracy leads to more variation in congruence scores between the countries being accounted for [40]. Given the particularities of VAA data, the wide degree of uncertainty is due to sampling error, more precisely to the bias that accompanies these data.

Figure 8 on page 119 presents the random country intercepts of the models with *absolute citizen congruence* as the response variable. The countries that present higher levels of congruence after controlling for system level characteristics are relatively constant across the models[41] (England, Spain and the Netherlands).

other words, $x_{centered} = x_j - \bar{x}$

[39]Or fractionalization of the party system

[40]ICC = 0.10 in the *Economy* baseline model and 0.14 in the *Economy.c* model with system level predictors, ICC = 0.18 and 0.25 in the *Social.c* models. However, in the *EU.c* model the variability between countries decreases once we control for country level predictors

[41]For the *Economy.c* model, the random country intercepts are at 0. This doesn't mean that

There is not enough variation in the old democracy variable to be able to say something meaningful about the performance of new democracies. The larger variation in congruence scores on the *Social* issue area from Figure 7 is evident when one investigates the difference between the countries' intercepts in the lower left panel of Figure 8. Countries' intercepts vary from 62.4 to 74 from the intercept in the *Social* issue area, while the variation on the *EU* issue area is smaller (74 to 84).

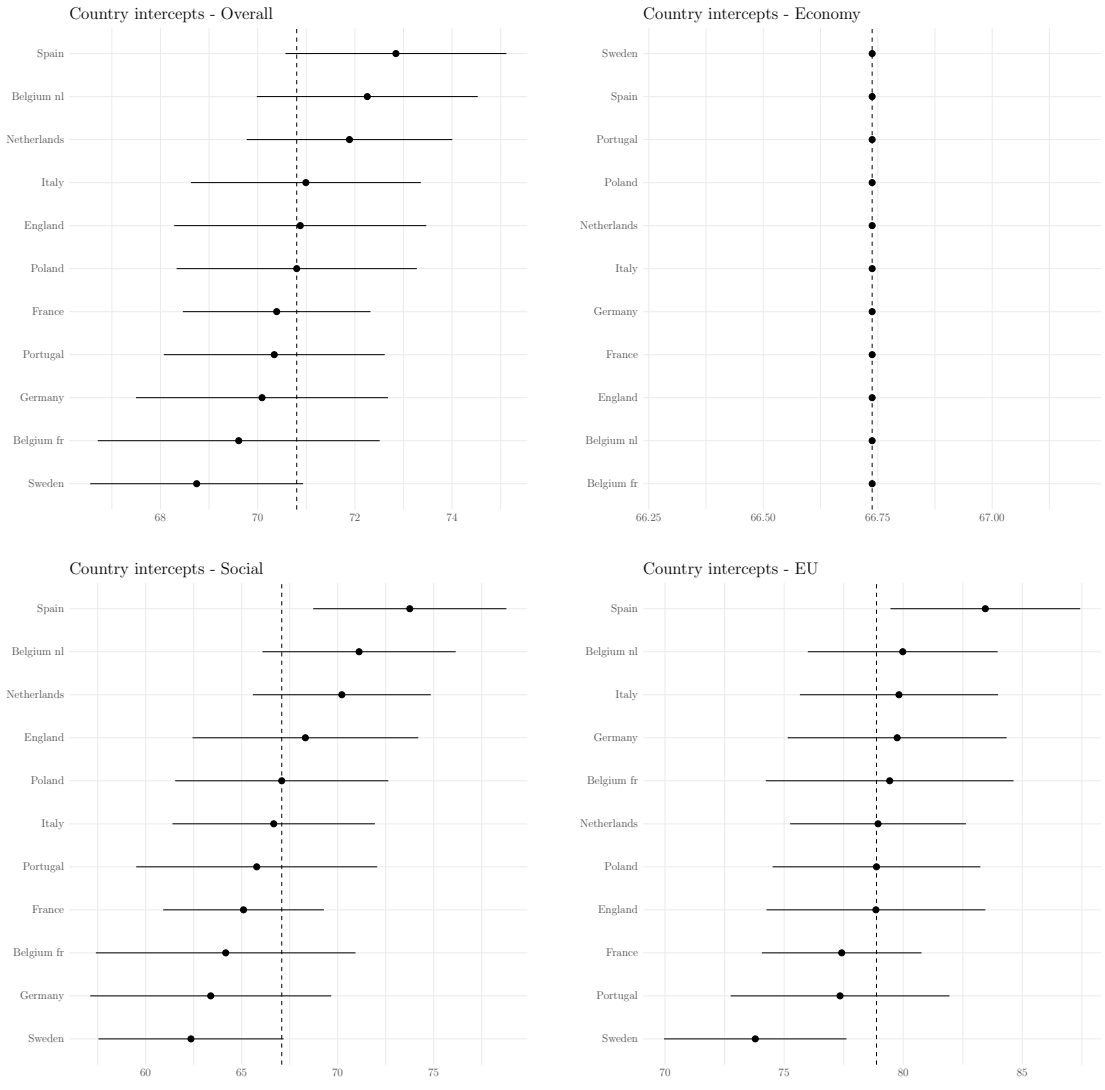

Figure 8: Random country intercepts - EU Profiler Absolute citizen congruence

there is no variation between the groups, but that for this model, adding variance a variant component for the country variable does not improve the fit of the model

4.3.3 2009 EU Profiler data - *Relative congruence*

4.3.4 Preliminary findings - 2009 EU Profiler data *Relative congruence*

In this section, the focus moves to the *relative* measure of congruence. As preliminary hypothesis testing[42], the correlation plots in Figure 9 on page 122 present the associations between country level predictors and congruence, assessed as a *relative* measure. The effective number of parties, polarization and old democracy indicate a positive association, while the disproportionality of the system suggests a negative relationship. District magnitude does not present any clear pattern. As in the previous subsection, the large standard errors are attributed to the small number of observations.

4.3.5 Results - 2009 EU Profiler data *Relative congruence*

The results of the linear mixed effects models with *relative congruence* as response variables are presented in Table 7 on page 121. As in the models with *absolute citizen congruence* as dependent variables, there are four regression models, *Overall.c, Economy.c, Social.c* and *EU.c*. *Relative congruence* is assessed at the party level, taking values from 0 to 100.[43]

In testing the effect of the number of parties, district magnitude, polarization and old democracy, the coefficients have the hypothesized direction for hypotheses *H1, H3, H4* and *H5*[44], but the results fail to reach the conventional threshold of statistical significance.

The ICCs are extremely low, indicating that there is low variability across countries. The small differences are visible in Figure 10 on page 123, where I explore the variation in the countries' intercepts. Table 28 on page 235 of Appendices, presents the baseline models, with results suggesting that the ICCs change only for the *EU.c* model. For the *Economy.c* and *Social.c* models the ICCs do not change, indicating that the low variability across countries remains even after

[42]Table 21 on page 232 of Appendices shows the Pearson R correlation coefficients of congruence and the country level predictors assessed in 2009

[43]The tests for variation in *relative congruence* assessed in 2009 across issue areas show a statistically significant difference (see Table 22 on page 233 of Appendices)

[44]except in the *EU.c* model

Table 7: Relative congruence EU Profiler

	Dependent variable:			
	Congruence			
	Overall	Economy	Social	EU
EFNP	0.90	1.07	1.39	0.10
	(1.17)	(1.32)	(1.73)	(1.25)
Polarization	1.21	1.13	1.76	0.68
	(0.99)	(1.11)	(1.44)	(1.04)
LSq	0.16	0.07	0.51	−0.33
	(1.34)	(1.51)	(1.95)	(1.39)
Old democracy	0.60	2.24	5.41	−5.29
	(3.19)	(3.60)	(4.89)	(3.66)
District magnitude	−0.33	0.28	−0.99	−0.21
	(1.05)	(1.18)	(1.53)	(1.10)
Constant	82.54***	79.97***	79.39***	87.62***
	(3.06)	(3.45)	(4.68)	(3.49)
Observations	95	95	95	95
Random variance	2.55	3.15	2.67	3.32
Residual variance	56.24	71.93	144.45	91.17
ICC	0.04	0.04	0.02	0.03
Log Likelihood	−318.371	−329.294	−359.860	−336.852
Akaike Inf. Crit.	652.742	674.588	735.720	689.705
Bayesian Inf. Crit.	673.173	695.019	756.151	710.136

Note: *p<0.1; **p<0.05; ***p<0.01

Number of countries = 11

Source: 2009 EU Profiler

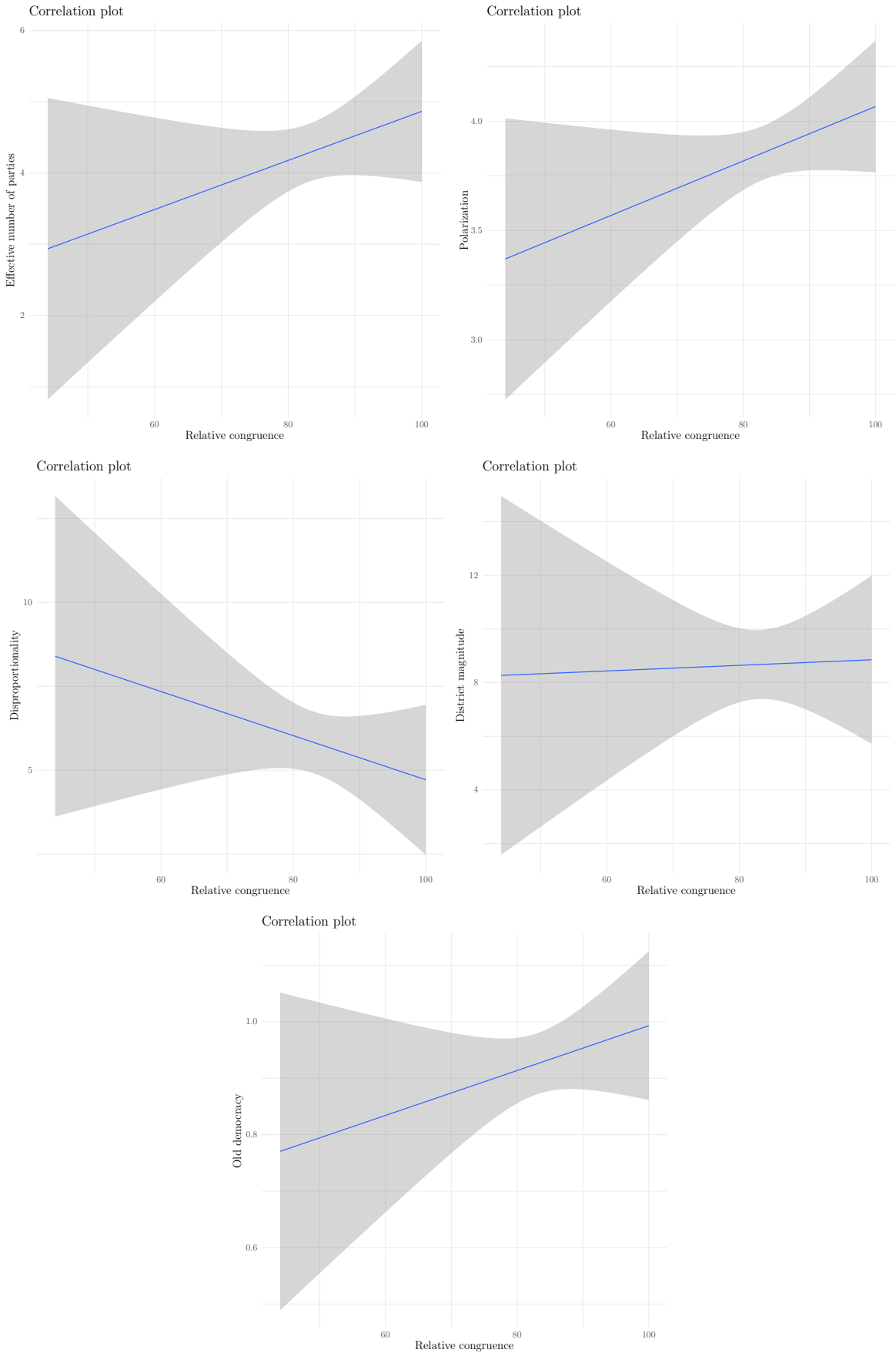

Figure 9: Correlation plots - EU Profiler Relative congruence - Overall

controlling for country level predictors.

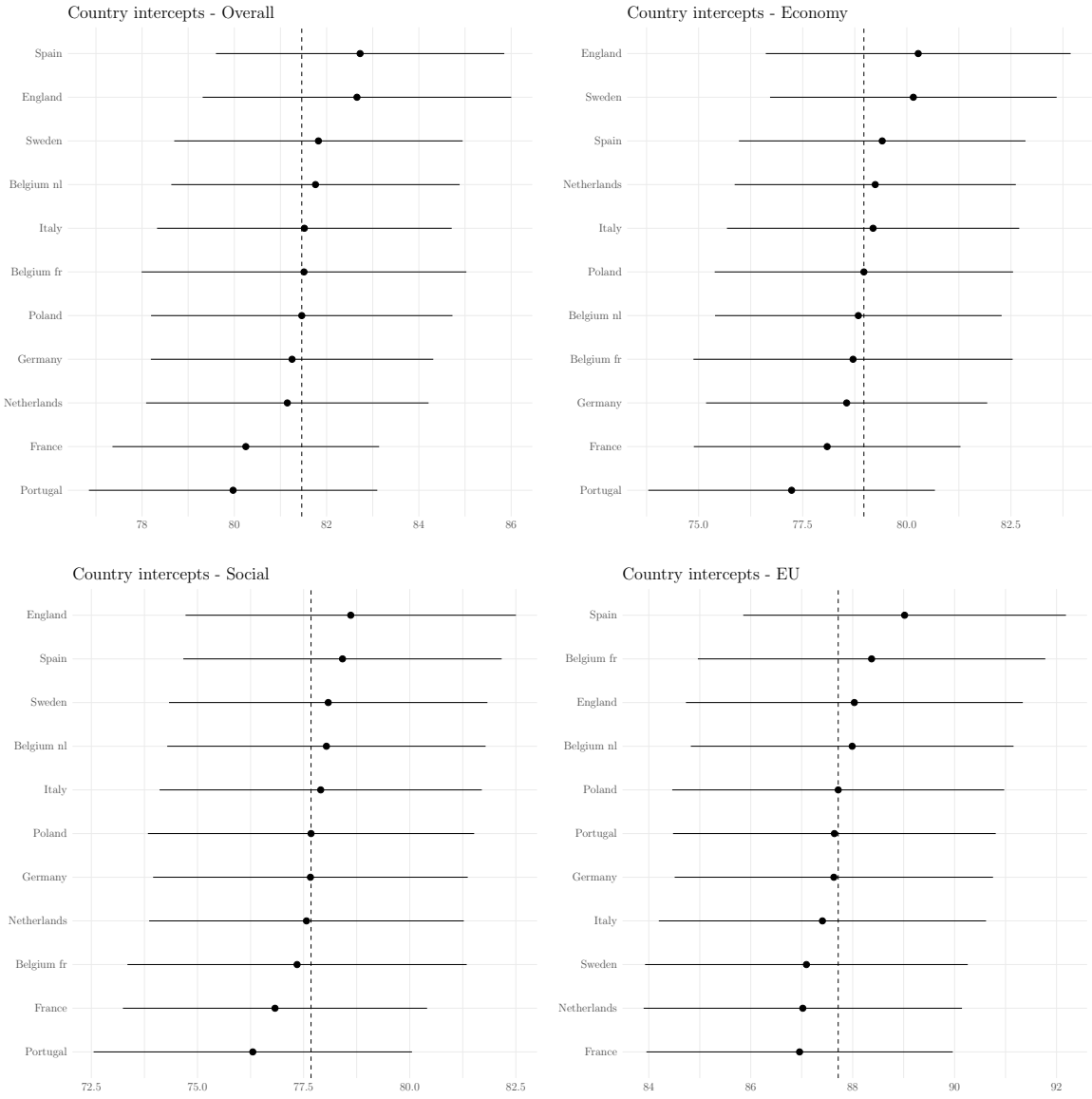

Figure 10: Random country intercepts - EU Profiler Relative congruence

4.4 2014 EUvox data

As with the analysis of the 2009 EU Profiler, I begin by exploring the variation in congruence scores across issue areas, for both *absolute citizen* and *relative* measures of congruence. Table 8 on page 125 presents *absolute citizen* and *relative congruence* scores, assessed with the help of 2014 EUvox data. Each measure of congruence is assessed on *Economy, Social* and *EU* issue categories, but also on an *Overall* dimension. The variation of congruence scores on issue dimensions is illustrated with the help of density plots. Figure 11 on page 124 presents the density distribution of *absolute citizen* and *relative congruence* values per issue area.

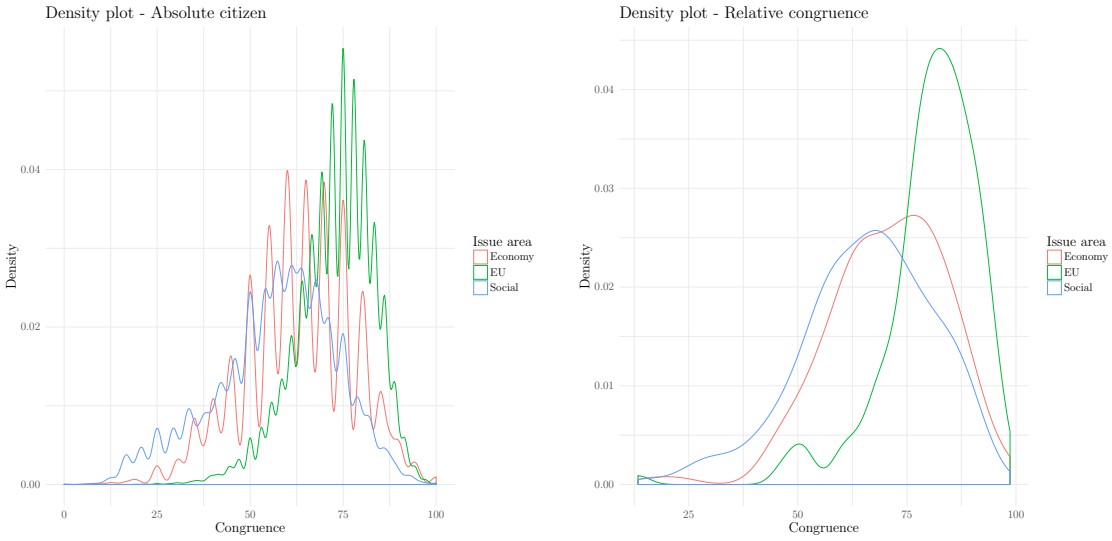

Figure 11: Density plots - EUvox

The *Social* issue area presents the most dispersed values, whereas the *EU* has most dense ones. The pattern is similar for both measures of congruence. The *Social* issue area has the largest standard deviations for congruence scores assessed in 2014, as well in 2009.[45]

4.4.1 2014 EUvox data- *Absolute citizen congruence*

Table 9 presents country level predictors, assessed in 2014. The bias towards old democracies from the 2009 dataset is reduced, with new democracies, such as Romania, Slovakia or Hungary entering the pool of countries available for analysis .

[45] See Figure 7 on page 116

Table 8: 2014 EUvox - Country level congruence scores

	Absolute citizen congruence				Relative congruence				
Country	Overall	Economy	Social	EU	Overall	Economy	Social	EU	*N*
Austria	70.12	65.88	61.90	78.31	71.18	69.36	66.55	77.64	*2375*
Bulgaria	68.23	65.90	62.33	73.66	75.69	67.15	72.13	87.80	*2128*
Czech Republic	76.59	73.69	77.25	77.63	74.33	70.79	80.52	71.96	*5902*
Denmark	63.36	61.37	54.48	69.99	70.90	67.86	57.44	87.09	*40688*
England	71.21	71.35	65.18	74.34	74.33	75.39	70.51	77.08	*16280*
Estonia	73.41	64.64	73.52	78.12	80.35	70.50	82.01	88.55	*4692*
Finland	68.59	71.46	59.41	74.18	76.75	84.50	59.73	86.02	*2515*
France	61.88	53.43	61.71	67.11	68.88	68.79	61.91	75.95	*1693*
Germany	64.40	61.76	57.35	71.05	67.51	63.44	58.66	80.44	*3217*
Hungary	70.47	67.46	67.56	74.33	75.64	76.38	69.77	80.79	*1350*
Ireland	65.85	63.13	57.64	74.09	67.78	68.84	60.22	74.29	*2310*
Italy	67.07	69.56	60.44	70.96	79.05	81.87	60.22	88.17	*459*
Lithuania	65.03	62.32	55.79	73.67	71.79	70.39	58.35	86.64	*1900*
Netherlands	71.10	68.22	59.72	77.28	66.83	69.44	57.29	73.75	*600*
Northern Ireland	66.70	71.94	62.21	66.89	72.50	74.23	62.60	80.66	*430*
Poland	66.68	57.43	64.40	73.63	70.52	65.70	64.69	81.18	*19053*
Portugal	64.05	57.85	54.64	74.01	64.66	62.63	49.94	79.55	*8382*
Romania	73.14	72.71	69.92	75.55	79.89	76.14	75.84	87.70	*2173*
Scotland	69.68	62.54	73.93	70.34	74.48	65.13	81.71	76.60	*2062*
Slovakia	65.23	65.97	54.16	73.56	79.22	78.81	74.81	84.04	*740*
Slovenia	69.96	65.99	66.70	74.79	75.08	71.34	75.66	78.24	*414*
Spain	60.07	61.29	40.51	72.82	63.24	65.68	45.08	78.96	*29708*
Wales	69.66	61.03	72.62	72.13	74.40	64.14	83.00	76.07	*1531*
Mean	65.60	62.9	57.0	72.8	72.4	70.7	65.8	80.6	
Standard deviation	8.38	14.7	16.15	10.34	8.76	13.55	15.12	11.31	

Absolute citizen congruence is assessed at individual level; Relative congruence is assessed at party level

Source: 2014 EUvox

4.4.2 Preliminary findings - 2014 EUvox data *Absolute citizen congruence*

The correlation plots in Figure 12, page 127, present the associations between country level predictors and congruence, assessed as *absolute citizen congruence*. The plots suggest that there is a positive association between the effective number of parties and congruence, as hypothesized *(H1)*. The relationships between polarization*(H3)*, disproportionality*(H2)*, district magnitude*(H4)* and old democracies which indicate negative associations, especially in the case of old democracy, that has the steepest decrease, contrary to the theoretical expecta-

Table 9: Country level predictors - 2014

Country	EFNP	LSq	Polarization	District magnitude	Old democracy
Austria	3.96	3.31	3.96	20.30	1
Bulgaria	5.06	5.06	4.37	4.74	0
Czech Republic	6.12	6.12	5.43	14.29	0
Denmark	5.61	0.73	3.57	10.50	1
England	2.57	15.10	2.37	1.00	0
Estonia	4.72	2.34	4.46	9.20	0
Finland	5.83	2.95	2.85	13.33	1
France	2.83	17.66	4.43	1.00	1
Germany	3.51	7.83	3.34	1.90	1
Hungary	2.01	17.80	5.85	4.00	0
Ireland	3.52	8.69	2.20	4.00	1
Italy	3.47	17.34	3.89	22.50	1
Lithuania	5.28	9.08	3.41	35.30	0
Netherlands	5.70	0.99	4.04	8.30	1
Northern Ireland	4.16	4.22	2.37	1.00	1
Poland	3.00	5.9 5	2.92	11.20	0
Portugal	2.93	5.68	3.19	10.50	0
Romania	2.12	6.20	2.13	1.00	0
Scotland	2.61	7.45	2.37	1.00	1
Slovakia	4.01	7.46	5.14	150.00	0
Slovenia	3.97	6.57	2.15	10.00	0
Spain	2.60	6.93	4.58	6.69	1
Wales	2.90	10.47	2.37	1.00	1

tions outlined in *H5*.[46]

4.4.3 Results - 2014 EUvox data - *Absolute citizen congruence*

Table 10 on page 128 presents the results of linear mixed effects regression models using an *absolute citizen* measure assessed in 2014. Across models, the effect of the effective number of political parties *(H1)* is in the hypothesized direction

[46]These associations are supported by the correlation tests in Table 23, page 234 of the Appendix. *Absolute citizen congruence* scores are positively correlated with the effective number of parties and disproportionality of the system, but present a negative, although small, correlation with district magnitude, polarization and old democracy. Even though new countries were added to the dataset, the correlation coefficients between the country level predictors do not change much

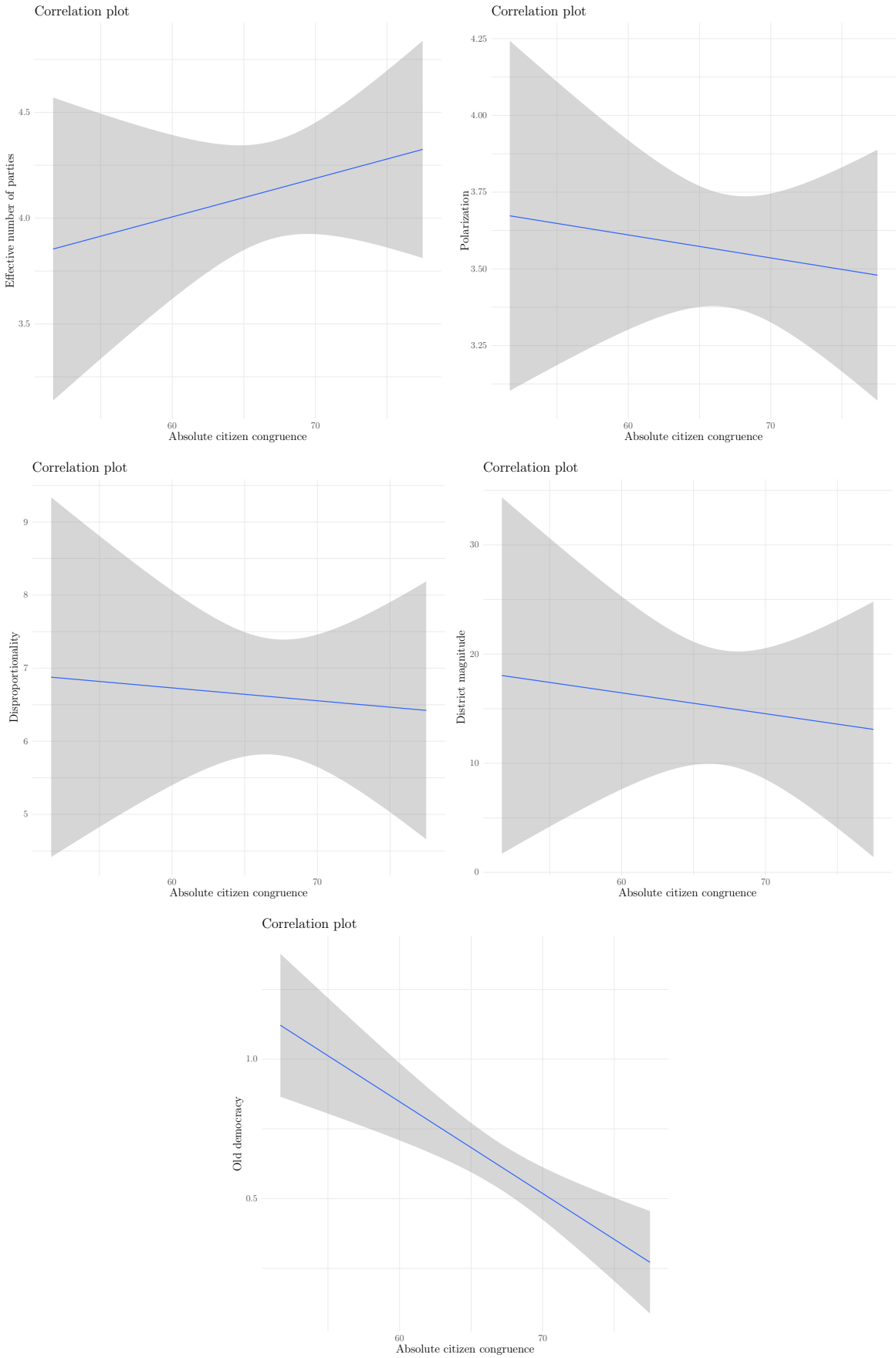

Figure 12: Correlation plots - EUvox Absolute citizen congruence - Overall

in the *Social.c* and *EU.c* models, although they do not reach statistical significance. The old democracies of Western Europe present less congruence, with the largest effect found in the *Social.c* model, where old democracies score almost 10 congruence points less then the CEE countries. The hypothesis finds support also across the *Overalll.c* and *EU.c* models.

Table 10: Absolute citizen congruence - EUvox

	Dependent variable:			
	Absolute citizen congruence			
	Overall	Economy	Social	EU
EFNP	0.78	1.78	1.84	0.78
	(0.96)	(1.30)	(2.12)	(0.96)
Polarization	−0.84	−1.48	−1.94	−0.82
	(0.78)	(1.08)	(1.72)	(0.78)
Disproportionality	0.36	0.30	2.36	0.36
	(0.88)	(1.22)	(1.92)	(0.88)
Old democracy	−4.78***	−3.24	−9.86***	−4.78***
	(1.54)	(2.08)	(3.34)	(1.54)
District magnitude	−0.74	0.40	−2.48	−0.74
	(0.74)	(1.02)	(1.64)	(0.74)
Constant	70.24***	66.86***	67.84***	70.24***
	(1.162)	(1.571)	(2.524)	(1.162)
Observations	155	155	155	155
Random variance	7.18	9.50	40.22	7.18
Residual variance	18.38	52.86	54.26	18.38
ICC	0.28	0.14	0.44	0.28
Log Likelihood	−355.859	−413.406	−422.547	−355.859
Akaike Inf. Crit.	727.717	842.812	861.094	727.717
Bayesian Inf. Crit.	750.149	865.244	883.526	750.149
Note:				*p<0.1; **p<0.05; ***p<0.01

The intra class coefficients for each of the 4 models are reported in Table 10 and in Table 29 on page 235) of Apendices for baseline models. The low ICC of the *EU.c* model indicates that 0.7% of the total variance in *absolute citizen* congruence

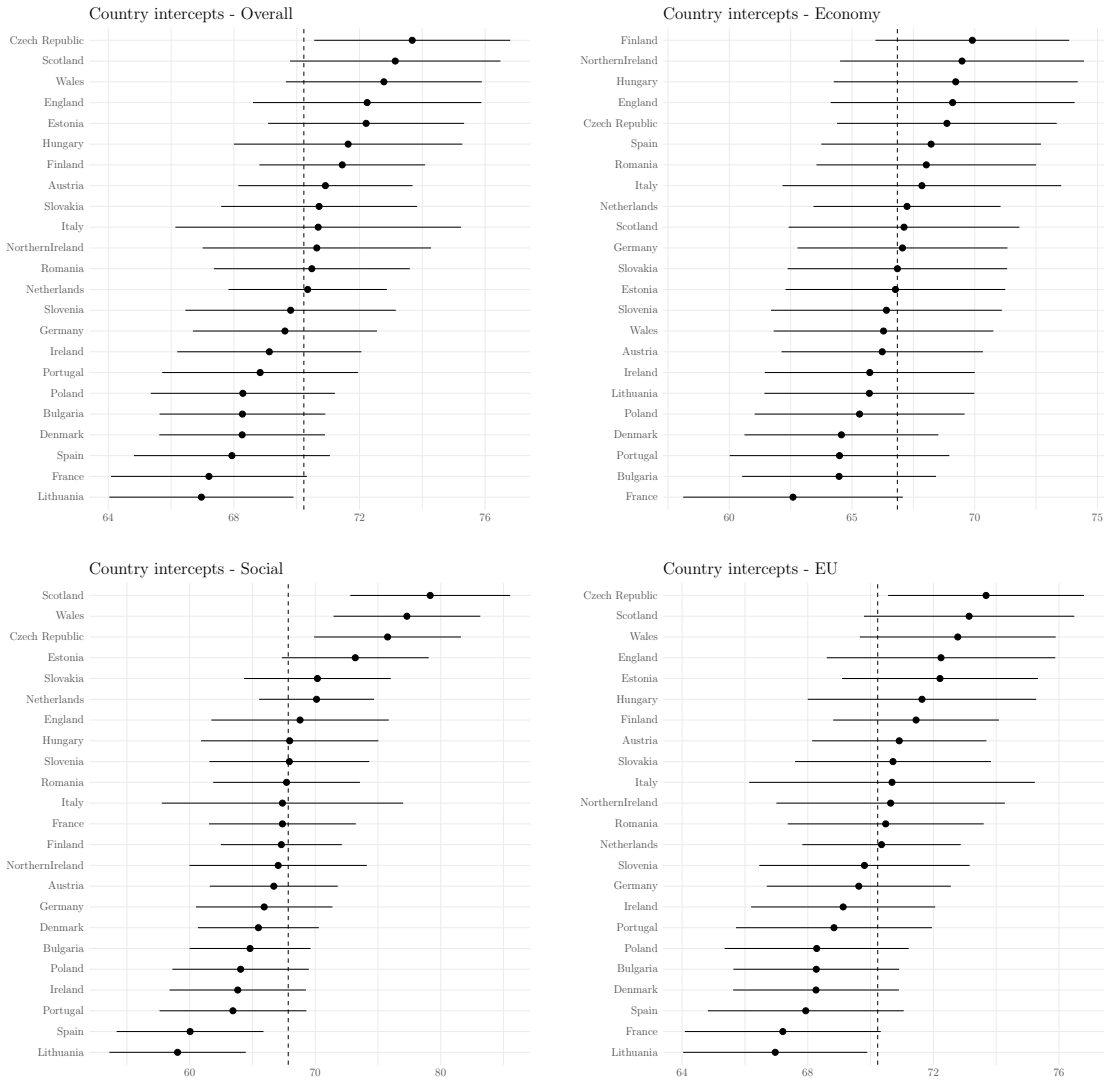

Figure 13: Random country intercepts - EUvox Absolute citizen congruence

scores are accounted for by the clustering in the data, namely the countries. Although this means that individuals' congruence scores are not very different as we move from one country to other, the ICC for the *Economy.*c and *Social.c* model indicate that 14% and respectively 27% of variation is accounted for by clustering under countries.[47] Accordingly, a larger part of the total variation in congruence scores is between country variation in the *Economy.c* and *Social.c* models.

As stressed above, the ICCs in Table 10 suggest that 27% of the variation in congruence scores in the *Social* model is between country variation. I explore

[47]The variation in congruence scores across the issue areas has been tested for and the results of the tests are presented in Table 24. As the low p-values suggest, the variation across the different issue dimensions, observed in Figure 11 and Table 8 is not due to chance

this variation in Figure 13, plotting the the random effects of the intercept. The values of the countries' intercepts vary from 51.24 (Spain) to 80.54 (Scotland). The variation is smaller when we look at the *Economy.c* and *EU.c* model. There is no clear pattern visible across countries. Comparing the ICC of the baseline models (Table 29, page 235 in Apendices) with the ICC of the models in Table 10, we notice change in the *Social.c* and *EU.c* models. By controlling for country level variables, the variability between countries decreases slightly.

4.4.4 2014 EUvox data - *Relative congruence*

4.4.5 Preliminary findings - 2014 EUvox data *Relative congruence*

The association plots from Figure 14 are used as preliminary hypothesis tests. Illustrating the effect of the number of parties, polarization and district magnitude, *H1, H3, H4* are supported by association plots, although there is a large amount of error. *H2* and *H5*, portraying the effect of disproportionality and old democracy are not supported by the data. [48]

4.4.6 Results - 2014 EUvox data *Relative congruence*

The results of the mixed effects models, with *relative congruence* as response variables are presented in Table 11 on page 131.[49]. The effect of a country's status as an old democracy *(H5)* has a negative effect on *relative congruence*, with the largest effect found in the *Social.c* model, where citizens in new democracies are

[48] As it can be seen in Table 26 on page 235 of the Appendices, the *relative congruence* scores are positively correlated with the effective number of parties and disproportionality of the system, district magnitude and polarization. Old democracies tend to present lower levels of *relative congruence*. This relationship is present for both correlation analyses, with r = -0.27***. The negative correlation between disproportionality of the system and district magnitude is present in 2014, as in 2009 (r = -0.20*** and r = -0.1), indicating that as district magnitude increases, the disproportionality decreases. Old democracies and district magnitude are negatively correlated, in both years and all four correlation analyses, but the results may due to the fact that the countries with a district magnitude of 1 are old democracies.

[49] The difference in variation in congruence scores across issue categories visible in Figure 11 on page 124 is tested using the 'Asymptotic test for the equality of coefficients of variation from k populations' and the 'Modified signed-likelihood ratio test for equality of CVs'. The results are presented in Table 25 The low p-values suggest that the variation across the different issue dimensions is not due to chance.

Table 11: Relative congruence EUvox

	Dependent variable:			
	Relative congruence			
	Overall	Economy	Social	EU
EFNP	1.53	2.75*	1.37	0.64
	(1.16)	(1.49)	(2.57)	(1.52)
Polarization	−1.48	−1.19	−2.43	−0.98
	(1.03)	(1.34)	(2.23)	(1.35)
LSq	1.88*	2.71*	2.70	0.44
	(1.13)	(1.47)	(2.53)	(1.48)
Old democracy	−4.47**	0.47	−10.33**	−3.43
	(1.93)	(2.51)	(4.25)	(2.53)
District magnitude	1.34	2.63**	0.48	0.89
	(1.04)	(1.32)	(2.39)	(1.36)
Constant	75.36***	70.44***	72.71***	82.82***
	(1.45)	(1.91)	(3.17)	(1.90)
Observations	168	166	166	168
Random variance	8.39	5.51	62.68	12.97
Residual variance	61.34	166.86	141.78	116.08
ICC	0.12	0.03	0.31	0.10
Log Likelihood	−583.178	−652.296	−649.360	−634.037
Akaike Inf. Crit.	1,182.356	1,320.592	1,314.721	1,284.074
Bayesian Inf. Crit.	1,207.347	1,345.488	1,339.617	1,309.066
Note:				*p<0.1; **p<0.05; ***p<0.01

Number of countries = 23

Source: 2014 EUvox

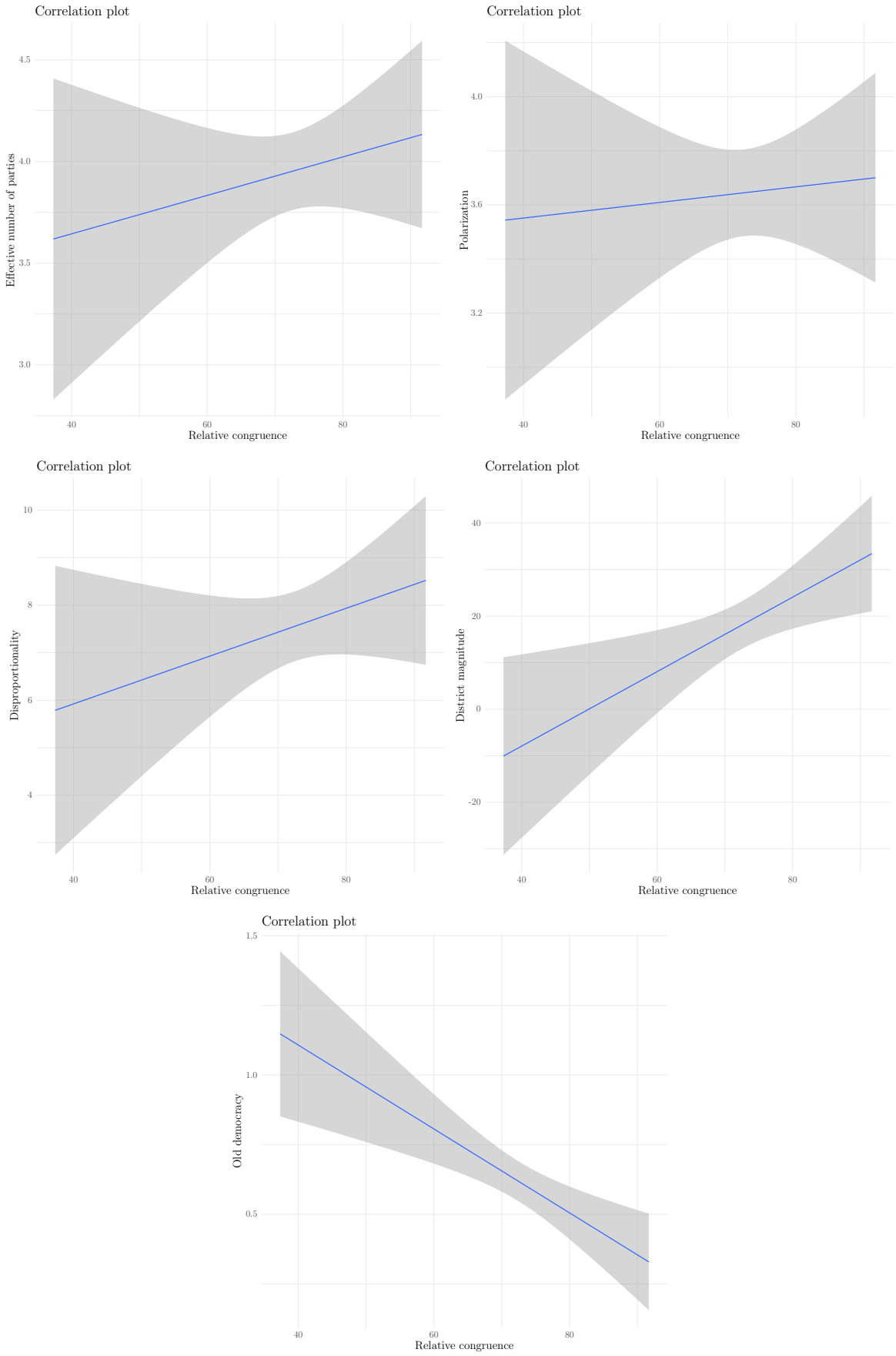

Figure 14: Correlation plots - EUvox Relative congruence - Overall

10.33 points more congruent with their most preferred party. The hypothesis finds support in the *Overall.c* model as well.

The hypotheses regarding the effect of the effective number of parties and district magnitude find support in the *Economy.c* model. Contrary to the theoretical expecttations, disproportionality has a positive effect on congrunece scores, but the result reaches statistical significance only in the *Economy.c* model.

The largest variation between countries is found on the *Social* issue area, with the model presenting an ICC of 0.31. The random variance for countries is 62.78, higher than in the rest of the models. I explore this variation in Figure 15. The country intercept in the *Social* model is set at 72.71, with a standard error of 3.17. Looking at the random effects of country intercept (Figure 15), we notice that some countries in the data set have intercepts as low as 59.54 (-13.17 value of random effect) for Lithuania or 62.02 (-10.69) for Spain and as high as 82.9 (9.58) for Scotland.

The standard error for the country intercept in the *Social.c* model is higher, compared to the *Economy.c* and *EU.c* models across the regression models, with *absolute citizen* and *relative congruence* assessed in 2009 and 2014.

Compared with the baseline models (Table 30, page 236 of Appendices), once we control for country level predictors, the variability across countries is reduced, for the *Economy.c* and *Social.c* models.[50]

4.5 Discussion

In this section I investigated the effects of system level predictors on congruence, assessed with the help of 2009 EU Profiler and 2014 EUvox data. The effect of effective number of parties, polarization, district magnitude, disproportionality of the system and old democracy status were tested against *absolute citizen* and *relative* congruence. Both *absolute citizen* and *relative* congruence scores are assessed at a party level. Due to the nesting of the data, with parties nested under countries, a multilevel approach was preferred. For both election years, 2009 and 2014, the two measures of congruence are assessed on the *Economy,*

[50]From ICC = 0.07 to 0.03 for the *Economy.c* model and ICC = 0.36 to 0.31 for the *Social.c* model

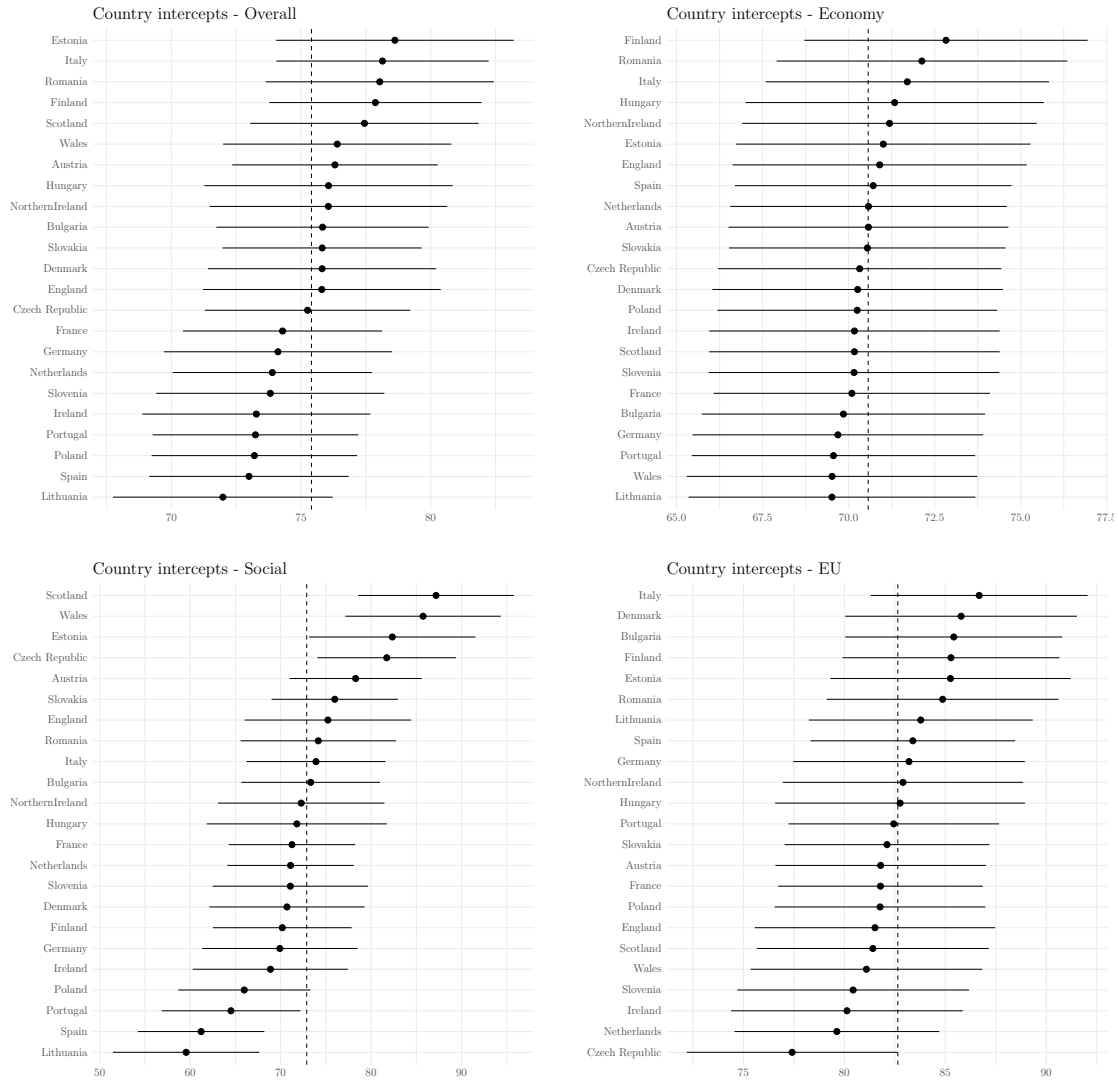

Figure 15: Random country intercepts - EUvox Relative congruence

Social and *EU* issue areas, plus an *Overall* measure.[51] The linear mixed effects models did not prove sufficient in explaining the variation in congruence across countries, but it offered insights into the variation in congruence across issue dimensions.

Contrary to the theoretical expectations, old democracies tend to present lower levels of congruence. In the instances where the estimates reached statistical significance, the hypotheses are not supported by the data. The expected contrast between old and new democracies, based on the reasoning that Western democracies are more stable and institutionalized, with a long democratic history is not found. However, this result is in line with previous research (Dalton 2017*b*).

[51]The *Overall* measure is assessed as an average across the congruence scores on the *Economy, Social* and *EU* issue areas

What the results show is that old democracies present lower levels of congruence on the *Social* issue area, as data from 2014 shows. However, these results can be attributed to the bias inherent in VAA data. As mentioned throughout the thesis, VAA data is biased towards young, better educated individuals, with higher levels of interest in politics. The new democracies of Eastern Europe are countries with less VAA experience compared to the older democracies of Western Europe. Consequently, the biases are exacerbated in these countries. I will explore these expectations later on, in the centered on individual level characteristics.

4.6 Conclusion

As presented in the introductory and theoretical chapters, Dalton (1985) studied dyadic correspondence between citizens and party elites by calculating 'issue centrism' scores[52], and a measure of political 'responsivness',[53] on issue areas, such as economic policy, foreign aid, security policy and new politics. In a similar manner, I investigated congruence as the agreement between a citizen and the party she intends to vote for in the upcoming EP elections, on three issue areas, *Economy, Social* and *EU*. The system level characteristics tested by Dalton (1985), PR system, number of parties and legislative fractionalization proved to have different correlation estimates, depending on the issue domains. This was one of the reasons I focused on issue domains, to explore the variations across issue dimensions. This conclusion section is built around three major points, addressing the lack of consistent results, the variation across issue domains and the differences across the two measures of congruence.

Although preliminary hypotheses testing suggested that the number of parties, the polarization and proportionality of the system may impact congruence, the results of the mixed effects models proved inconclusive. Besides the varying

[52]Issue centrism is defined by Dalton (1985) as a measure of representation that 'focuses on aggregate policy agreement between parties and voters. Centrism implies that parties locate themselves near the centre of the opinion distribution of their supporters. The dispersion of opinion within the constituency is not considered, because parties presumably have little control over the variation in policy views among their voters. [...] centrism measures whether a party represents the policy preferences of its average voter.' (Dalton 1985, p280)

[53]assessed as the result of a regression equation between the party elites' mean position and the party supporters' mean position (Dalton 2017*b*)

direction of the effects in the case of polarization and the status of a country as a new or old democracy, the large standard errors stop me from drawing any conclusions regarding the direction or strength of the relationship. However, the lack of findings is line with the results of previous studies (Belchior 2013). In spite of the inconclusive results, the analysis provided some interesting insights with regards to congruence on issue areas. Mainly, it did show that there is variation across issue areas, which makes for a promising research avenue, which brings me to the second point.

The variation in congruence scores across issue areas is reflected in the mixed effects models not only in the effect of the predictors, but also on the values the regression constants take, which are highest on the *EU* area across both elections and congruence measures. One of the benefits of assessing congruence on issue areas is that we avoid the 'trap' set by ideological congruence, that assumes a unidimensionality in the political space. In this work, this unidimensionality is represented by the *overall* assessment of congruence. Focusing only on this measure, we obtain one portrayal of congruence. However, the ranking of countries is distorted when congruence is assessed on the *Social* issue area, for example.

I will discuss at length the comparison between *absolute citizen* and *relative* measures of congruence in the Conclusions chapter of the thesis. For the time being, after assessing the effect of system level predictors on congruence, one can notice that the two measures tell a relatively similar story. However, when assessed with the *relative* measure, congruence values are higher with 10 points on average.

Moving from the *overall absolute citizen* to *relative congruence*, the pattern across countries is consistent, but less so when we turn our attention towards issue areas. With congruence assessed as an *absolute citizen* measure, there is more variation across countries on the *Social* issue area, compared to the *Economy* or the *EU*. Countries are most similar on the *EU* issue dimension. When congruence is assessed as a *relative* measure, the *Social* issue area remains the category with the largest variation across countries. For the purpose of this section, using a *relative* approach to congruence showed a slightly more positive image of congruence in the countries under study.

In the next section, the focus is on party level characteristics, such as niche or mainstream status, ideological leaning, governmental status and the election cycle. After failing to show that country level predictors impact congruence, as Belchior (2013) suggests, turning our attention towards a lower level of explanation, namely party level characteristics, may represent a more fruitful avenue.

5 Party characteristics and issue congruence

'Electoral systems however do influence niche party competitiveness. The role of niche parties in turn has dramatic implications for the way in which representation works. Thus, electoral systems matter because they influence the level of niche party competition.' - Ezrow (2010)

5.1 Introduction

In the previous chapter, *Congruence under different institutional designs*, I tested the effects of system level characteristics, including: polarization, district magnitude, the number of political parties, proportionality of the electoral system and the status as an old or new democracy. These characteristics were tested on the match between individuals and the party they intend to vote in the upcoming elections to the European Parliament, assessed as *absolute citizen* and *relative* congruence. By matching I am referring to the agreement between citizens and their most preferred party.[54] Because 2009 EU Profiler and 2014 EUvox datasets used in the previous chapter contain information on the European member states, to account for nesting in the data, a hierarchical modeling approach was taken. The data did not support the hypotheses (see summary of hypotheses tests, in Table **??** on page **??**). One possible culprit may be the measures of congruence used, namely issue congruence. Most representation studies assess the match between citizens and their representatives.[55]. However, failing to show that the aforementioned predictors have an effect on congruence are a common finding in representation studies (Belchior 2013)

Political parties are the agents responsible for the well functioning of a democracy,

[54]Identified as the party they intend to vote for in the upcoming elections to the European Parliament

[55]The representative can be a government, individual legislators or political parties

due to their central role in articulating citizens' political preferences. The focus of this section is on the characteristics of political parties that may impact the match between citizens and their representatives. I will address two points that stand out in representation studies, both best assessed within the analysis at the party level. The first one is related to the niche party status, and calls on more attention to be paid to the role that niche parties play in the process of democratic representation. The second point addresses the reasons behind the non-findings in the analysis at the country level.

Following Meguid (2005) niche parties differ from mainstream parties in three significant ways. First of all, instead of prioritizing economic demands, niche parties focus on issues neglected by the mainstream parties. Second, the issues promoted by niche parties are not only novel, but also diverge from the existing structure of political division. A third and last differentiation, niche parties focus on a limited number of issues, and most times are being perceived as single issue parties. Their importance in the process of democratic representation is the focus of the steady stream of studies, pioneered by Meguid (2005, 2008).

Niche parties refer to those parties that occupy the extreme Left and Right, or a non-centrist position. They belong to Green, Communist and Right-wing Nationalist party families, while mainstream parties belong to Conservative, Christian Democratic, Social Democratic or Liberal party families Ezrow (2010).

Niche party supporters are often overlooked in traditional surveys. Rather than overlooking, traditional surveys do not reach groups such as niche party supporters. However, VAA data, as an opt-in sample, does include this particular group. I am referring here to the bias inherent in VAA data, with most of respondents being young, highly educated and highly interested in politics. Most often perceived as negative, the bias in VAA data can also work to a researcher's benefit. Probably the main advantage of the VAA data is that it reaches groups in society that are not easily accessible with traditional surveying methods. One of these groups is represented by the supporters of niche parties. Knowing the issue preferences of VAA users opens a great opportunity to investigate the match between niche party supporters and their most preferred party, expressed as vote intention.

The second point focuses on the question 'what is next?', when confronted with non-findings of country level analysis. Ezrow (2010) argues that electoral systems matter for political representation in a different way than it was preached over long decades in representation studies. He stresses the importance of niche parties as agents promoting congruence. Ezrow's (2010) main argument is that citizens who have access to both pathways in a democracy, one created by mainstream parties and the other by niche parties, are better off than citizens who have access only to a mainstream pathway. While supporting the point raised above, that niche parties promote congruence, Ezrow's (2010) explanation helps to address my second point, the one related to the non-findings in the analysis at a country level. Testing the effect of an electoral system's settings on the match between citizens and parties may not prove fruitful, exactly because the electoral systems matter in a different way than it was thought. Some electoral systems make it easier for niche parties to become institutionalized and ultimately, to offer political alternatives.

Non-findings are a common result in congruence studies focusing on country-level predictors Belchior (2013). After failing to show that proportionality and fractionalization of the electoral system determine the ideological congruence between MPs and citizens, and following Belchior (2013), I will turn my attention towards the characteristics of political parties.

Accordingly, the aim of this section is to explore the relationship between parties' characteristics and their ability to represent the political preferences of their supporters. By parties' characteristics I am referring to the mainstream/niche differentiation and governmental status. However, Reif (1984) suggests that accounting for governmental status is not enough. One has to control for the amount of time a party has been in government. Accordingly, I will account for election cycle, calculated as the time between the national and EP elections, as suggested by Reif (1984). I will also control for the ideological leaning of the party (Left, Right, or centrist).[56]

[56]Although the most popular approach is the placement of parties on a ten or seven point Left-Right scale, for ease of analysis, I coded the parties on a 3 point Left-Right scale, using their party family affiliation

5.1.1 Hypotheses

Based on Belchior's (2013) results, suggesting that centrist parties are more congruent with their supporters, I hypothesize that

H6: Parties at the centre of the ideological spectrum are less congruent with their supporters.

However, centrist parties, in trying to attract the median citizen, loose their ideological edge. Alternatively, one could argue whether niche parties are better in representing their voters compared to mainstream parties. Ezrow (2010) argues that citizens in PR systems are better represented, compared to plurality systems, because they are presented with more avenues for representation, which he calls pathways. More precisely, his argument is based on the fact that niche parties offer new channels of representation, that are not offered by mainstream parties who respond only to changes in the mean voter position. The analysis developed in this section focuses on the effect of niche party status, tested with the following hypothesis:

H7: Niche parties present higher levels of congruence with their supporters, compared to mainstream parties.

Another reason behind this hypothesis is that given the nature of the measure of congruence, especially the *relative* one, the distribution of preferences within a niche party is expected to be smaller, compared to a mainstream party.

Going on step further, and following (Ezrow 2010, p. 121), who argues that citizens in disproportional systems are not able to reward political parties for policy distinctiveness, I test whether parties in more proportional systems are more congruent with their supporters. More precisely, this relationship is tested with a cross-level interaction between the disproportionality of the electoral system and niche/mainstream party status.

H7a: Niche parties will present higher congruence with their voters on the in systems with higher proportionality

Based on the findings of Mattila & Raunio (2006), Dalton, Farrell, McAllister et al. (2011), who argue that generally, larger parties are more congruent with their voters on economic issues, rather than social or cultural ones, I hypothesize that:

H7b: Mainstream parties will present higher congruence with their voters on the Economic issue dimensions

Based on the assumption that niche parties perform better on the *Social* issue area, and because there are less niche parties in Eastern Europe, I expect that

H7c: Eastern European democracies will present lower levels of congruence on Social issues

The hypothesis is based on the assumption that due to the lack of niche parties in Central and Eastern Europe, social issues are not pushed on the political agenda and that consequently political competition revolves around economic issues, where mainstream parties are in closer agreement with their supporters.

Regarding governmental status, the expectation is that parties with higher governmental status present lower degrees of congruence with their supporters. The logic behind this reasoning is that government parties tend to be more centrist and larger. By adopting a centrist position, parties are losing their ideological distinctiveness, leading to confusion among their voters with regards to policy stances. Accordingly,

H8: Parties with governmental status present lower levels of congruence with their supporters.

Controlling for governmental status is not enough, as the timing of the elections matters as well. Reif (1984) devised the concept of an election cycle, as the period of time between the European elections and national ones. The expectation is that a party with high governmental status will present lower levels of congruence, the further it goes in an election cycle.

H8a: As the elections to the European Parliament are closer to the national ones, parties with higher governmental status present lower levels of congruence with their supporters.[57]

Investigating the effect of incumbency status on the positions of the parties on EU issues, Arnold & Franklin (2012) argues that incumbent parties are more likely to be in favour of European integration (Arnold & Franklin 2012). I hypothesize that

[57]In other words, the expectation is that there will be a significant interaction effect between the election cycle and governmental status variables

H8b: Parties with high governmental status will tend to present higher levels of congruence on the EU issue area.

5.1.2 Data

As in the previous section, data from the 2009 EU Profiler and 2014 EUvox are used to assess congruence and to test the effect of its predictors. The same hypotheses are tested on both data sets.[58] Comparisons between the 2009 EU Profiler data and 2014 EUvox data have to be treated with caution, since the data is not representative of the countries' voting population and the country sample sizes vary dramatically between the two data sets.[59] As flagged throughout the thesis and emphasized in the beginning of this section, the main caveat of VAA data is a lack of representativeness. VAA users tend to be young, better educated and more interested in politics, nut are non-representative of the population at large. Among these VAA users are supporters of niche parties, whose opinions are not easily captured through traditional surveys.

Congruence between the VAA users and their most preferred party expressed as vote intention is assessed as *absolute citizen* and *relative* congruence. The *absolute citizen* measure is assessed at an individual level, and individual scores are aggregated to obtain party scores. *Relative* congruence is assessed at a party level. The structure of the analysis is similar to the previous chapter, which focused on country level predictors of congruence. I start by looking at congruence assessed as *absolute citizen* and *relative* congruence, measured with data collected through the 2009 EU Profiler, then I use the same modeling strategy on the 2014 EUvox data.

5.2 2009 EU Profiler data

The 2009 elections to the European Parliament ran in 27 countries, where a number of 736 political parties participated. Due to data limitations, the 2009 EU Profiler dataset is reduced to 11 countries, with 94 parties (see Table 31).[60]

[58] Due to data constraints, the final 2009 EU Profiler data set includes 11 countries (Belgium is split between Flanders and Wallonia), while the 2014 EUvox contains 24 countries

[59] As expected, the data sets from countries with less VAA experience are smaller

[60] Some of the political parties in the VAA dataset did not compete in the EP 2009, such as MRC - France. Because they are associations, not registered as political parties, they are not

Table 31 in Appendix shows the party level predictors assessed in 2009, as well as the values of congruence scores for each of the parties included in the data set.

5.2.1 Preliminary findings - 2009 EU Profiler

Because niche party status is one of the variables that make the focus of this study, I will start by exploring the relationship between niche parties and congruence. Following Meguid (2005), a party is categorized as niche party if it emphasizes a limited number of issues that are usually neglected by the mainstream parties and it is usually known as a single issue party. The operationalization of niche parties is restricted to Green, radical-right/nationalist, Communist and ethno-territorial party families.

Niche parties are not a new phenomenon; Green parties emerged in the 1970s, and radical Right parties emerged in the 1980s and 1990s (Meguid 2005). However, compared to the mainstream parties, their number is relatively low. To get an overview of the difference in numbers between niche and mainstream parties, while accounting for ideological leaning, I divided the parties into Left, centre and Right wing parties. Among the 94 parties for which congruence scores were assessed, 18 are niche parties. Figure 46 illustrates the distribution of parties across the niche versus mainstream and ideological leaning in the 2009 EU Profiler data set. Even though there are less niche parties than mainstream ones, one can look at the distribution of congruence scores across these categories.

mentioned in the 'The 2009 Elections to the European Parliament. Country Reports' (Gagatek 2010) used as reference material

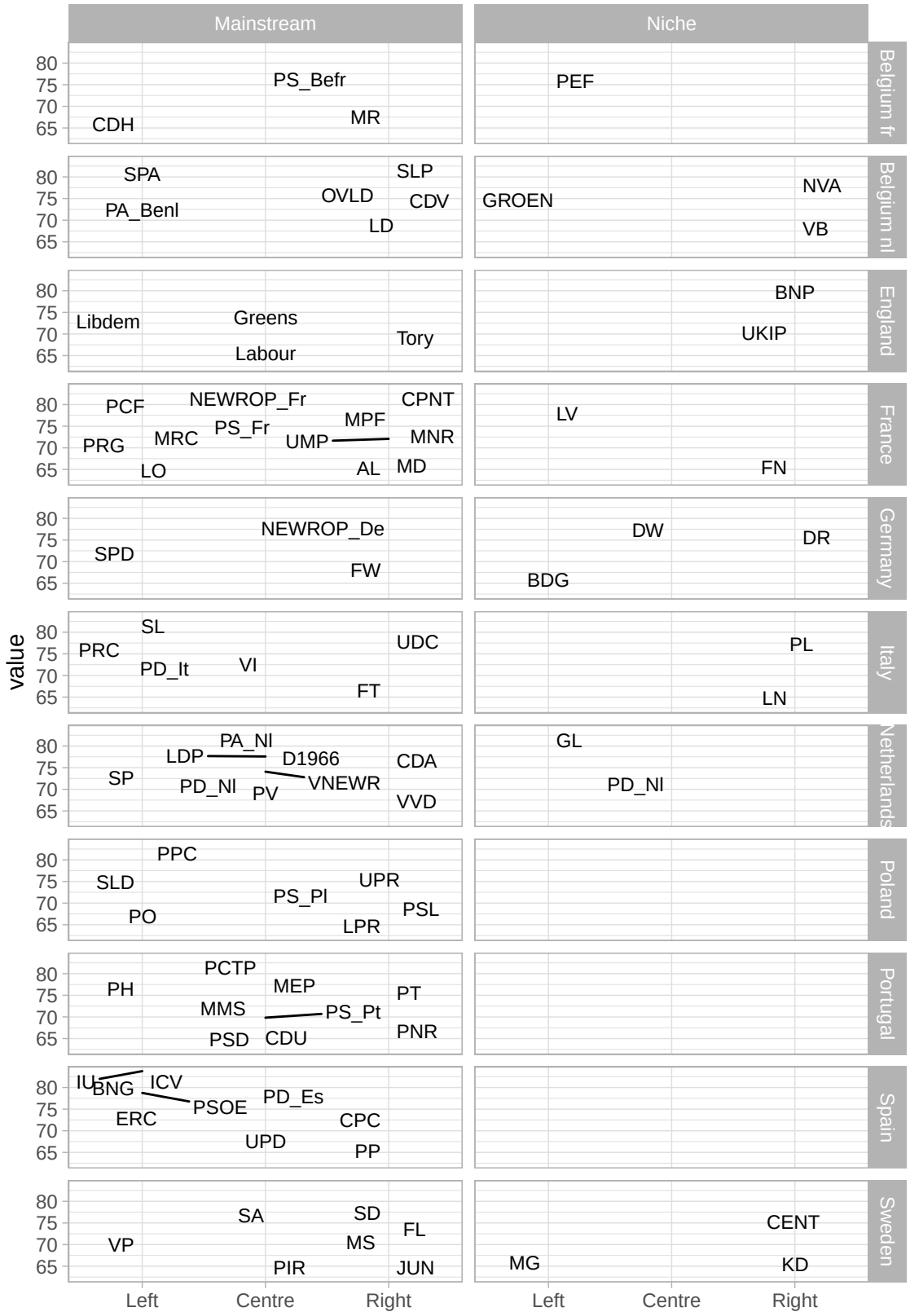

Figure 16: EU Profiler *Absolute citizen congruence* Niche vs Mainstream

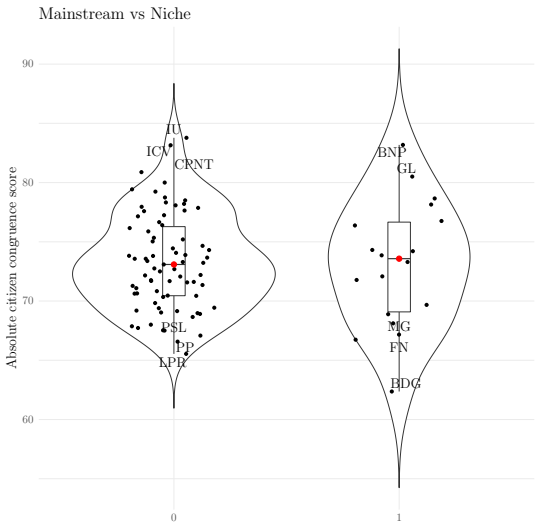

Figure 17: Violin plots - EU Profiler *Absolute citizen congruence*

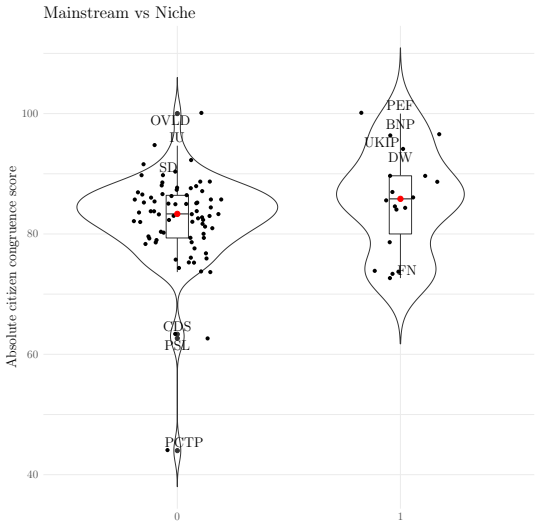

Figure 18: Violin plots - EU Profiler *Relative congruence*

Figures 17 and 18 present the density distributions of party congruence scores, illustrated as violin plots, for the *absolute citizen* and *relative* congruence measures. The right side pane of the figures show the distribution of congruence scores for niche parties, and the left side for mainstream ones. At the top are the illustrated the parties on the Right side of the ideological spectrum, while at the bottom are the ones on the Left.[61] When congruence is assessed as an *absolute citizen* measure, niche parties on the Right present in general less congruence

[61]Because only one of the niche parties was coded as a centre party, I removed this category from the plots

compared to niche parties on the Left side of the ideological spectrum.[62] However, the congruence scores of parties on the Left, both niche and mainstream, vary to a higher degree. Moving on to *relative* congruence, the distributions of congruence scores of parties on the Left and on the Right are more similar. Niche parties present higher congruence compared to mainstream parties.[63] At first sight, it seems that the way in which congruence is assessed depicts different stories of representation.

Table 32 on page 239 of the Appendix presents the mean party congruence scores for *Economy, Social* and *EU* issue areas, assessed with both measures of congruence. A careful examination shows that parties present higher level of congruence when assessed as a *relative* measure.[64] There is higher congruence on the *Social* issue area when congruence is assessed as an *absolute citizen* measure, but when the *relative* measure is used, the *EU* issue area comes in first. In the next subsection, I explore the variation in party congruence scores across issue areas with mixed effects models, fitting one model for each issue area.

5.2.2 2009 EU Profiler data - *Absolute citizen congruence*

Due to the nesting in the data, with parties being nested within countries, a hierarchical modeling approach is the most suitable one. As the results of the previous empirical chapter indicate, the country level predictors do not account for congruence, neither *absolute* or *relative*. After extending the model to include party level characteristics in addition to system level ones, it becomes:

$$\begin{aligned} y_{ijk} = \alpha_{kji} + \beta_1 EFNP_k + \beta_2 Disproportionality_k + \beta_3 DistrictMagnitude_k \\ +\beta_4 Polarization_k + \beta_5 OldDemocracy_k + \epsilon_i + \beta_6 Niche_j \\ +\beta_7 GovernmentalStatus_j + \beta_8 ElectionCycle_k + \beta_8 LeftRight_j + \epsilon_i \end{aligned} \quad (4)$$

[62] Right wing niche parties' *absolute citizen* congruence score mean = 71.86, Left niche parties' *absolute citizen* congruence score mean = 74.96

[63] Niche parties *relative* congruence score mean = 85.50, mainstream parties *relative* congruence scores mean = 82.42

[64] On the *Economy* issue area, mean = 73.16 for *absolute citizen* and mean = 81.09 for *relative* congruence, on *Social* issue area mean = 71.74 for *absolute citizen* and mean = 83.32 for *relative* congruence and for *EU* mean = 74.36 for *absolute citizen* and mean = 82.88 for *relative* congruence

and

$$\alpha_j = \mu_\alpha + \eta_j$$

.

Table 12 on page 149 presents the results of hierarchical regression models focusing on party level predictors that have *absolute citizen congruence* as a response variable. To account for nesting in the data, the models include only a random term for country, but also a random term for party.[65] The models *Overall.c, Economy.c, Social.c* and *EU.c* include just the party level predictors, while *Overall.p, Economy.p, Social.p* and *EU.p* are the extended versions of the models from the previous section, including niche and governmental status, the election cycle and ideological leaning of the party.[66]

5.2.3 Results - 2009 EU Profiler *Absolute citizen congruence*

Moving from models with party level predictors to the extended models, once we control for country level predictors, the effect of a party being in government and further away in the election cycle is associated with a decrease in congruence scores, but the results do not reach the conventional tresholds of statistical significace. The ICCs show that once we account for country level predictors in addition to party level ones, the explained variance at country level increases only in the *EU.p* model, but stays the same in the other models.

Hypothesis *H6* stated that parties at the centre of the ideological spectrum are less congruent with their supporters. The results are in the hypothesized direction across models, except for the *EU* area, but do not reach the threshold of statistical significance. Parties on the Right of the ideological spectrum present less congruence compared to parties on the Left, effect found across all models except the *EU.cp* one.

[65] I am not including a random intercept for parties, because the variation I am interested in is at the country level

[66] Although in a multilevel model, the third level (system-level) and second level (party level) predictors should be centered at their grand mean, I am using a group mean instead. The reason for this is that system-level predictors have one value per country, therefore a group mean suffices. Two of the party-level predictors are dichotomous, one is a factor variable and one continuous, centered on the group mean

Table 12: Mixed effects regression models - EU Profiler *Absolute citizen congruence*

	Dependent variable:							
	Absolute citizen congruence							
	Overall.p	Overall.cp	Economy.p	Economy.cp	Social.p	Social.cp	EU.p	EU.cp
Country level								
EFNP		0.52		−0.76		2.36		2.26
		(0.82)		(1.14)		(2.34)		(1.80)
Polarization		−1.18		0.24		−3.62		−1.90
		(1.18)		(1.60)		(3.20)		(2.48)
Disproportionality		−1.26		−0.72		−3.94		−1.42
		(1.24)		(1.68)		(3.50)		(2.68)
Old democracy		5.38*		6.78*		12.22		0.40
		(2.98)		(4.04)		(8.06)		(6.26)
District magnitude		−0.84		−0.08		−3.76		−1.24
		(0.96)		(1.30)		(2.70)		(2.08)
Party level								
Niche	0.48	0.28	0.434	0.28	3.08	2.92	−0.34	−0.32
	(1.16)	(1.16)	(1.40)	(1.42)	(2.48)	(2.46)	(2.04)	(2.06)
Governmental status	−1.00	−0.72	−2.94*	−2.78*	−3.50	−2.56	2.26	2.70
	(1.32)	(1.40)	(1.60)	(1.68)	(2.82)	(2.90)	(2.32)	(2.44)
Centre	−1.16	−1.34	−1.80	−1.96	−1.78	−1.80	1.12	1.26
	(1.18)	(1.20)	(1.44)	(1.44)	(2.62)	(2.62)	(2.10)	(2.12)
Right	−2.60**	−2.76**	−3.14**	−3.22**	−3.62	−4.16*	−0.68	−0.92
	(1.08)	(1.08)	(1.28)	(1.32)	(2.34)	(2.34)	(1.90)	(1.92)
Election cycle	−0.52	−2.06	0.34	0.14	−0.22	−5.20	−2.30**	−4.58*
	(0.62)	(1.28)	(0.88)	(1.76)	(1.70)	(3.46)	(1.16)	(2.72)
Gov. status * Election cycle	0.48	−1.14	0.16	−0.12	1.04	−4.18	0.16	−2.14
	(1.56)	(1.94)	(1.96)	(2.60)	(3.34)	(4.52)	(2.70)	(3.70)
Disproprtionality * Niche		1.20		0.60		3.68*		2.40
		(1.04)		(1.26)		(2.20)		(1.86)
Constant	74.66***	69.82***	74.96***	68.92***	74.46***	63.56***	73.60***	73.26***
	(0.90)	(2.88)	(1.18)	(3.90)	(2.20)	(7.66)	(1.64)	(5.60)
Observations	93	93	93	93	88	88	90	90
Random variance	1.74	2.10	4.92	4.48	20.10	20.86	6.82	11.66
Residual variance	15.96	15.92	23.08	23.28	69.08	68.00	49.22	48.90
ICC	0.10	0.10	0.16	0.16	0.24	0.24	0.12	0.18
Log Likelihood	−254.602	−246.162	−272.062	−261.743	−302.087	−287.119	−293.342	−281.406
Akaike Inf. Crit.	527.204	522.324	562.124	553.487	622.175	604.239	604.684	592.812
Bayesian Inf. Crit.	549.997	560.313	584.917	591.476	644.471	641.399	627.183	630.309

Note: *p<0.1; **p<0.05; ***p<0.01

Hypothesis *H7* advanced the proposition that niche parties present higher levels of congruence with their supporters compared to mainstream parties. The coefficients work in the same direction across models, expect in the *EU.p* model . The results do not reach the conventional threshold of a statistical significance of $p < 0.05$. However, when a significance test results in a high probability, it does not mean that the data provides no evidence that the null hypothesis is false (Wasserstein & Lazar 2016). In other words, a high probability is not evidence that the null hypothesis is true. Another important remark is that statistical significance is sensitive to the sample size. The sample sizes are rather small; 93 and 94 parties in 2009 EU Profiler data and 155 and 168 in 2014 EUvox data.

Looking at the disproportionality of the electoral system and its effect on congruence, the results suggest that more disproportional systems present less congruence. Going one step further, the hypothesis *H7a* tested whether the effect of niche parties on congruence is affected by the proportionality of the electoral system. The regression results do not back up Ezrow's (2010) argument that niche parties are rewarded for policy distinctiveness in proportional systems and that citizens have more means of representation, leading to more congruence. The coefficients work in the same direction and suggest that for niche parties, more disproportionality leads to less congruence, but the results reach statistical significance onlyin the *Social.cp* model. Hypothesis *(*H7b) put forward the expectation that mainstream parties will present higher congruence with their voters on economic issues, which is not supported by the data. Similarly, *(*H7c), testing whether parties in Eastern European democracies are less congruent with their supporters on social issues is not supported either.

Because looking at the effect of governmental status is not enough, hypothesis *H8a* tests whether the election cycle has an effect on issue congruence by introducing an interaction term between these two variables. Looking only at the extended models, for parties in government, congruence decreases as the country is further away in the election cycle. Although regression coefficients do not reach statistical significance, the coefficients work in the same direction. Parties on the Right side of the ideological spectrum present lower levels of congruence across the models.

Although the results do not reach the conventional threshold of statistical signif-

icance, this does not strip the results of substantive significance. As discussed by Wasserstein & Lazar (2016), P-values do not measure the probability that the data were produced by random chance alone.

The random country intercepts are plotted in Figure 19, after controlling for the effect of system and party level predictors. While *Economy.p* and *Social.p* models present a relatively similar pattern, the *EU.p* model tells a rather different story. Looking further into these differences, I identified the countries with highest and lowest intercepts, as well as the issues belonging to the *EU* issue area.

Table 13 presents the issues with lowest values related to the EU issue area, looking at the top three and bottom three cases, as indicated by the results of the mixed effects model (in Table 12, page 149). The aim of this exercise was to see whether there is a pattern across countries, more precisely if there is an issue or a set of issues on which parties and their supporters disagree. Issue 28 and 21 register among the lowest vales.[67]

Table 13: Congruence scores on issues

Issue	**Se**	value	**Eng**	value	**Nl**	value	**Es**	value	**De**	value	**Pt**	value
S21		**52.78**		61.97		67.93		84.11		64.60		**39.95**
S22		55.86		**49.54**		67.28		66.68		**55.07**		63.06
S23		57.61		52.93		73.88		84.11		67.93		58.83
S24		58.19		55.07		77.04		90.83		67.76		**34.60**
S25		55.01		**50.18**		61.80		**66.81**		58.53		68.86
S26		54.87		56.20		**61.13**		78.53		56.29		60.64
S27		54.97		60.71		65.90		79.99		64.40		69.13
S28		**52.30**		53.38		**56.59**		**56.37**		**54.53**		68.66

Source: 2009 EU Profiler

Note: Se, Eng and Nl register the lower values, Es, De, Pt higher values in Figure 19

[67]Issue 21: 'On foreign policy issues, such as the relationship with Russia, the EU should speak with one voice'. Issue 28: 'Any new European treaty should be subject to approval in a referendum in country X'

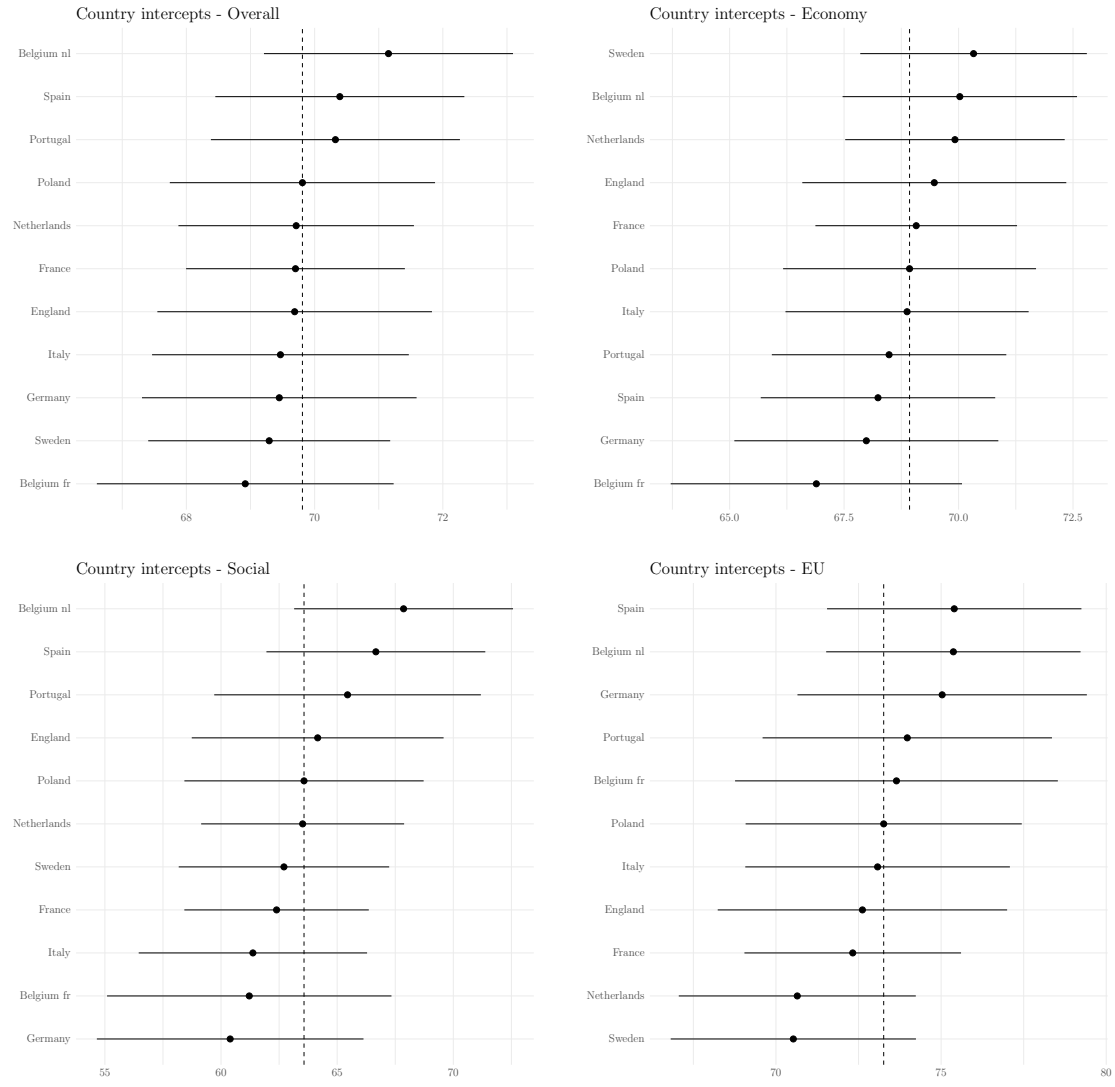

Figure 19: Country intercepts - EU Profiler Absolute citizen congruence

5.2.4 2009 EU Profiler data - *Relative congruence*

Moving from one way of assessing congruence to the other, Figure 43 presents the density distribution and means of *relative congruence* scores assessed in 2009, through violin plots. As discussed in the previous sections, where the 2009 EU Profiler data was introduced, the distribution of *relative congruence* scores on the Right and Left side of the ideological spectrum is rather similar. Looking at the issue dimension, overall, parties present a more positive image of representation when congruence is assessed as a *relative* measure, rather than an *absolute* one.

Table 14 on page 154 presents the mixed effects models with *relative congruence* assessed on the *Overall.c, Economy.c, Social.c* and *EU.c* issue areas as dependent variables.

5.2.5 Results - 2009 EU Profiler *Relative congruence*

Hypothesis *H6* advanced the proposition that parties at the centre of the ideological spectrum are less congruent with their supporters. As in the previous models, centre parties tend to be less congruent with their supporters by approximate 3 points on the congruence scale. However, the effect is much more modest on EU issues. Furthermore, parties on the right side of the ideological spectrum present lower levels of congruence across models, except on the *EU.c* one. This may be due to the fact that the anti EU policies are a characteristic of the Right, captured by the VAA policy statements. Even though the results point in the same direction, the large standard errors indicate that we can have little confidence in the direction of the relationships.

Hypothesis *H7a*, testing the interaction effect between the niche party status and the degree of disporportionality does not find support in the data, similar to hypothesis *H8a*, which introduces an interaction term between governmental status and the election cycle. Looking at the models with party predictors only, the interaction term has a positive effect (although it fails to reach statistical significance), suggesting that parties in government present more congruence, the further on they are in the election cycle. However, moving to the extended models, the regression results show that for parties in government, congruence decreases as the country is further away in the election cycle. The effect is found across the *Overall.pc, Economy.pc* and *Social.pc* models, but not for the *EU.pc* one. The ICCs do not tell a consistent story; moving from the party to the extended models, the country level variance explained increases only in the *Overall.c* and *EU.c* models.

Table 14: Mixed effects regression models - EU Profiler *Relative congruence*

	Dependent variable:							
	Relative congruence							
	Overall.c	Overall.cp	Economy.c	Economy.cp	Social.c	Social.cp	EU.c	EU.cp
Country level								
EFNP		0.845		0.943		1.365		0.300
		(1.259)		(1.535)		(1.803)		(1.829)
Polarization		−0.114		0.200		−0.011		−0.484
		(1.781)		(2.171)		(2.554)		(2.590)
Disproportionality		−1.795		−2.526		−2.337		−0.489
		(1.827)		(2.241)		(2.583)		(2.683)
Old democracy		3.897		4.839		9.882		−3.094
		(4.638)		(5.622)		(6.718)		(6.684)
District magnitude		−0.698		−0.228		−1.576		−0.256
		(1.456)		(1.779)		(2.077)		(2.126)
Party level								
Niche	3.408	3.019	3.707	3.321	5.225	4.316	0.896	1.634
	(2.161)	(2.219)	(2.489)	(2.524)	(3.477)	(3.535)	(2.734)	(2.861)
Governmental status	−3.495	−4.097*	−3.816	−4.345	−5.439	−5.895	−1.579	−2.106
	(2.267)	(2.386)	(2.631)	(2.720)	(3.642)	(3.787)	(2.849)	(3.088)
Centre	−1.872	−2.741	−3.228	−4.530	−2.545	−3.840	−0.314	0.096
	(2.410)	(2.579)	(2.826)	(2.951)	(3.860)	(4.059)	(2.991)	(3.359)
Right	−0.578	−0.623	−0.944	−1.203	−1.261	−1.200	0.312	0.739
	(1.856)	(1.901)	(2.128)	(2.160)	(2.990)	(3.036)	(2.360)	(2.447)
Election cycle	−0.539	−1.597	0.066	−0.897	−0.312	−2.162	−1.259	−1.709
	(1.010)	(2.027)	(1.310)	(2.474)	(1.583)	(2.901)	(1.158)	(2.954)
Gov. status * Election cycle	1.597	−0.126	0.135	−1.275	1.580	−1.565	2.966	2.542
	(2.516)	(3.133)	(2.959)	(3.674)	(4.032)	(4.787)	(3.137)	(4.265)
Disproportionality * Niche		0.888		2.583		2.092		−2.030
		(1.910)		(2.168)		(3.053)		(2.455)
Constant	83.626***	80.381***	83.005***	78.995***	85.248***	76.545***	82.860***	85.593***
	(1.487)	(4.531)	(1.812)	(5.470)	(2.365)	(6.614)	(1.803)	(6.484)
Observations	94	94	94	94	94	94	94	94
Random variance	1.98	2.78	6.54	4.24	3.68	0.00	0.00	7.42
Residual variance	56.90	57.08	73.90	74.22	148.30	0.00	93.28	94.82
ICC	0.02	0.08	0.08	0.04	0.02	0.00	0.00	0.06
Log Likelihood	−311.213	−300.532	−323.788	−310.858	−352.574	−338.483	−331.632	−320.968
Akaike Inf. Crit.	640.427	631.063	665.575	651.717	723.148	706.966	681.264	671.937
Bayesian Inf. Crit.	663.316	669.213	688.465	689.866	746.038	745.116	704.154	710.086

Note: *p<0.1; **p<0.05; ***p<0.01

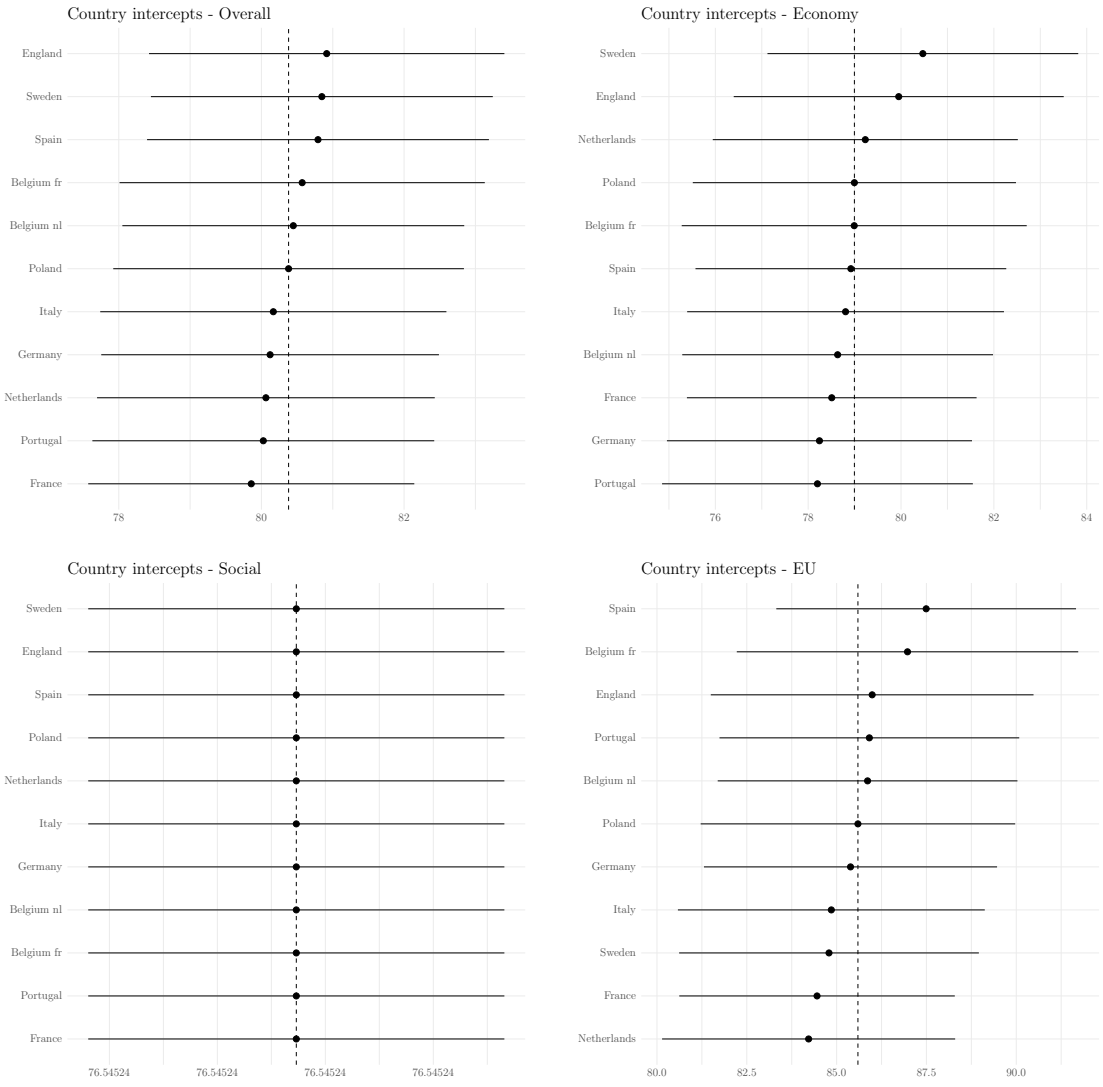

Figure 20: Country intercepts - EU Profiler Relative congruence

Figure 20 on page 155 presents the country intercepts and their values, extracted from the mixed effects models from Table 14 on page 154, where countries were introduced as a random term. For the *Social.c* model no random effects were identified. Looking at the *Economy.c* and *EU.c* models, we see that the countries do not present similar patterns. Countries that do well in representing their citizens' political preferences on the *Economy.c* issue area, such as Sweden and the Netherlands, do worse when we look at the *EU.c* models. These findings suggest that looking at the *Overall.c* model to judge how a country performs in terms of representation does not suffice. This finding applies to the analysis on both measures of congruence.

5.3 2014 EUvox data

Moving to EUvox data, Tables 34 on page 244 presents the values of congruence scores for parties, assessed with the help of data generated through the VAA tool for the 2014 elections to the European Parliament. The data set contains 20 countries (although there are 23 entities represented graphically, as Scotland, Northern Ireland and Wales are treated separately from England), and 168 parties.[68] The bias towards Western European democracies observed in the 2009 EU Profiler data set is reduced, because countries such as Hungary and Romania are included in the data.

5.3.1 Preliminary findings - 2014 EUvox

Tables 37 and 38 in the Appendices, page 247 presents cross tabulation on the niche and Right-Left variables. Compared with the 2009 EU Profiler (Table 32 on page 239 of the Appendices) the number of mainstream parties on the Left and on the Right doubles, but the increase in the number of niche parties is rather modest. The reason is because the new countries introduced in the data set, mostly Eastern and Central European democracies, do not include niche parties in their party system configuration. A more extensive description of the countries and parties included in the data set is found in Table 33 and 34 in the Appendices, page 241.

[68] Due to data limitations, for the *absolute citizen congruence* measure, the scores were calculated only for 155 parties out of 168

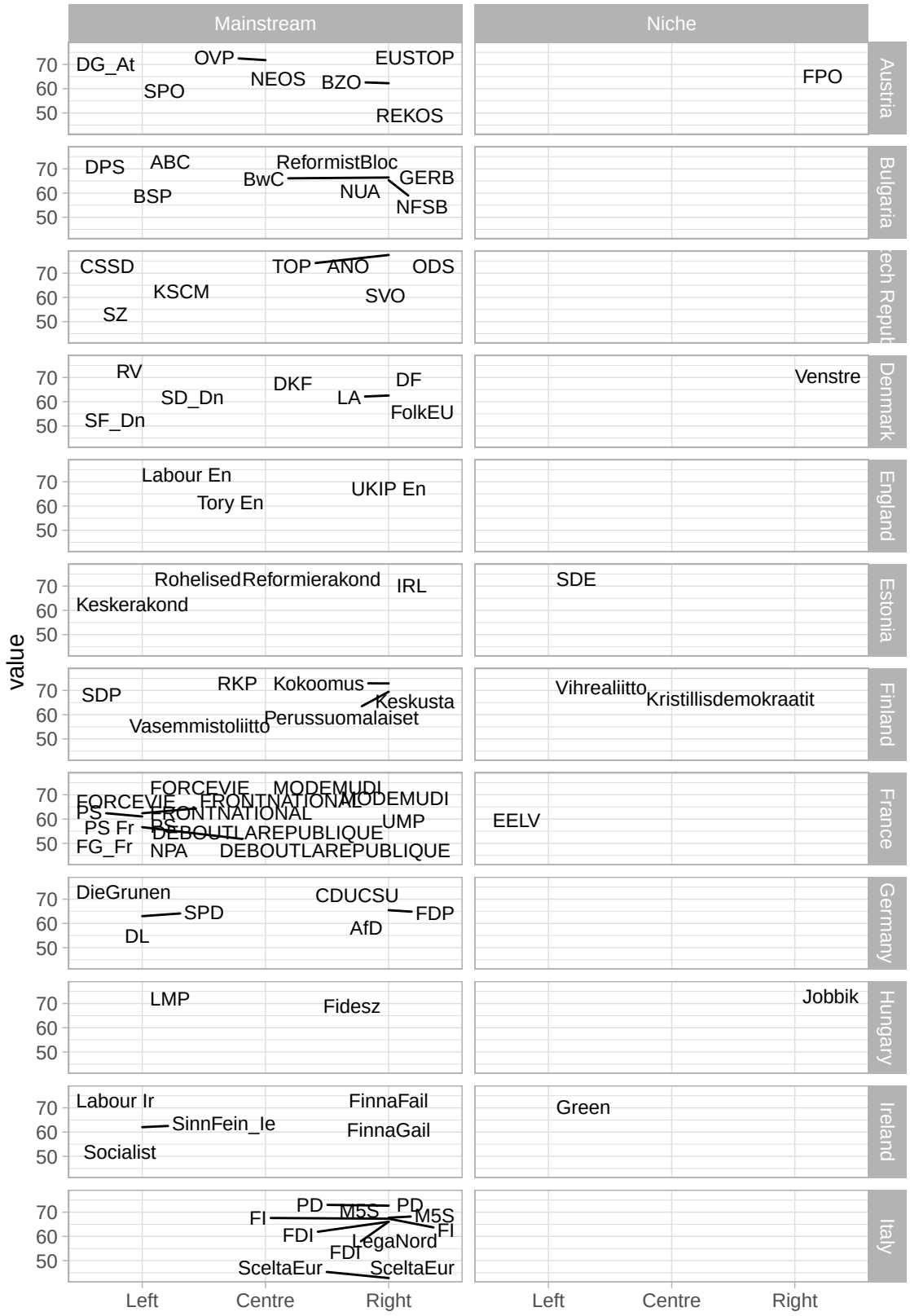

Figure 21: EUvox Relative congruence Niche vs mainstream 1a

Figure 22: EUvox Relative congruence Niche vs mainstream 1b

5.3.2 2014 EUvox data - *Absolute citizen congruence*

Figure 23: Violin plots - EUvox Absolute citizen congruence

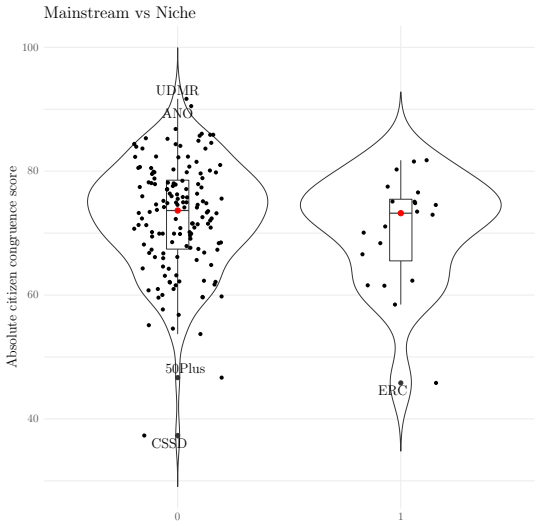

Figure 24: Violin plots - EUvox Relative congruence

Figure 44 on page 247 presents the density distribution of *absolute citizen congruence* assessed with the help of data generated through the 2014 EUvox tool. Overall, niche parties register slightly higher values of congruence compared to mainstream parties, but the difference consists of only one point. Adding another layer of differentiation, Left versus Right positioning on the ideological spectrum, we see that when it comes to niche parties, those on the Right perform less well than those on the Left. However, this does not hold when we shift the focus towards mainstream parties; on average, mainstream parties on the Right present

slightly higher levels of congruence with their supporters. These assessments of *absolute citizen congruence* were created on a total of 155 parties, among which 16 were niche and 139 were mainstream. A cross tabulation of the number of parties on ideological positioning and type of party, niche or mainstream, can be found in Table 37 in Appendices, page 247.

A similar cross tabulation table, only for *relative congruence* this time, can be found in Table 38 on page 247 of the Appendices. The number of parties for which a congruence score was calculated increased to 168, and more niche parties entered the data set. The density distributions, presented in Figure 45 show very different distributions if we compare niche parties to the mainstream ones, but rather similar average values. Looking at the Left/Right divide, parties on the right, both niche and mainstream, present higher levels of congruence with their supporters. The top right panel of Figure 45 indicates the presences of two outliers (British UKIP, who registers a rather high value (81.56) and the Dutch PVV, that registers a low congruence score (61.57)).

5.3.3 Results - 2014 EUvox *Absolute citizen congruence*

Table 15 on page 162 presents the mixed effects models with *absolute citizen congruence* assessed on the *Overall.c, Economy.c, Social.c* and *EU.c* issue areas as a dependent variable. Hypothesis *H6* advanced the proposition that parties at the centre of the ideological spectrum are less congruent with their supporters.The resylts suggest that on the contrary, centre parties are closer to their supporters on all issue areas, with the highest effect on Economy related issues, where centre parties are 4 points more congruent. Furthermore, parties on the Right side of the ideological spectrum present higher levels of congruence, a trend visible across all models. The effects reach statistical significance in all models, except the *Social.pc* one.

Hypothesis *H7a* introduces the interaction term between the disproportionality of the electoral system and niche party status, but it does not find support in the data. Mainstream parties are not more congruent with their supporters on economic issues *H7b*. Parties in Central and Eastern European democracies are more congruent with their supporters not just on the *Social* issue area, contradicting hypothesis *H7c*, but across all issue domains.

Hypothesis *H8a* introduces an interaction term between governmental status and the election cycle. The regression results show that for parties in government, congruence decreases as the country is further away in the election cycle. The effect points in the right direction across all models, but it fails to reach statistical significance. The ICCs (also the random variance) tell a rather interesting story; moving from the party to the extended models, the country level variance explained decreases, even though more explanatory variables were added.

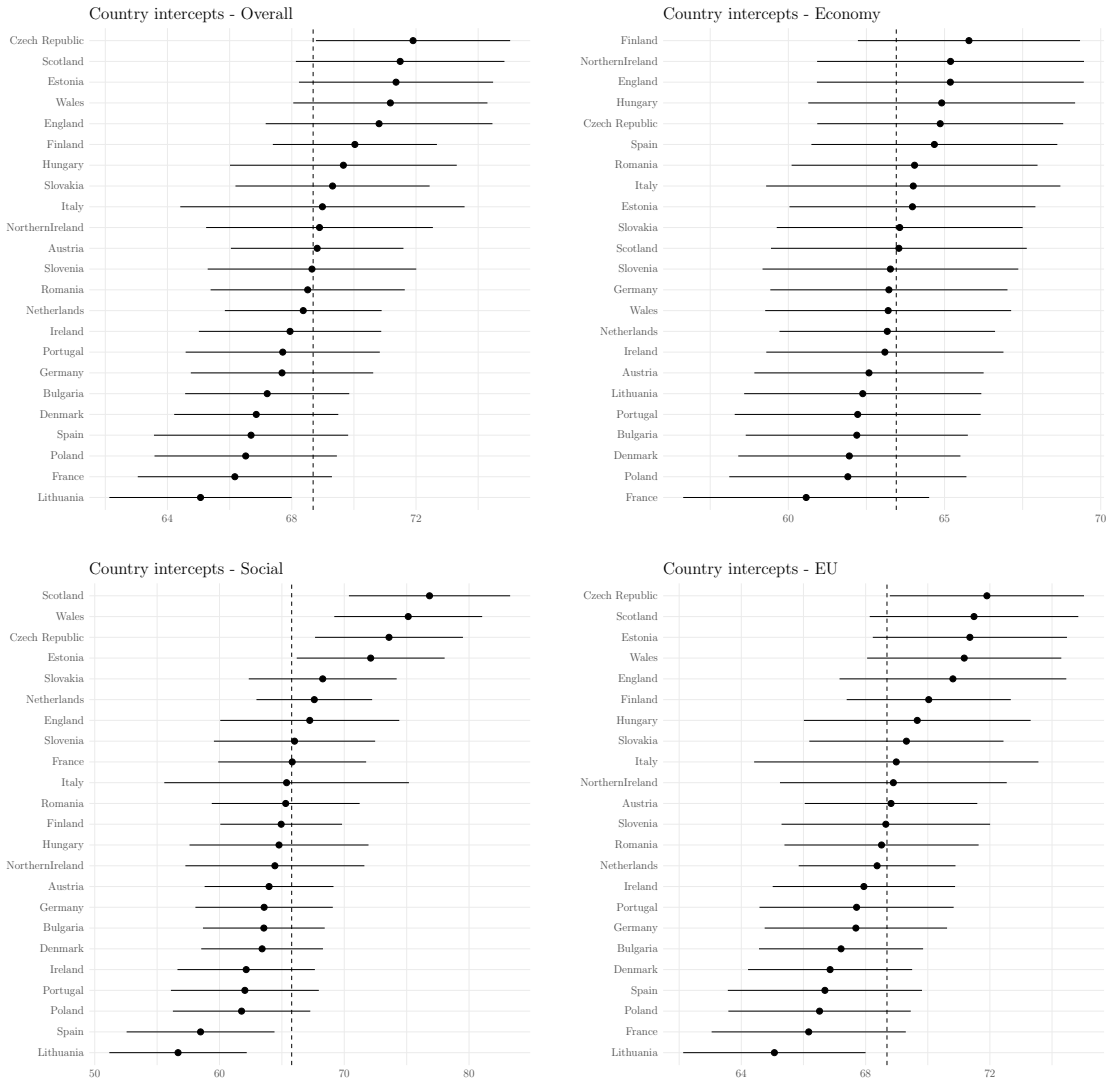

Figure 25: Density plots - EUvox Absolute citizen congruence

5.3.4 2014 EUvox data - *Relative congruence*

5.3.5 Results - 2014 EUvox *Relative congruence*

Hypothesis *H6* advanced the proposition that parties at the centre of the ideological spectrum are less congruent with their supporters, but the results show that

Table 15: Mixed effects regression models - EUvox *Absolute citizen congruence*

	Dependent variable:							
	Absolute citizen congruence							
	Overall.c	Overall.cp	Economy.c	Economy.cp	Social.c	Social.cp	EU.c	EU.cp
Country level								
EFNP		0.76		1.42		1.88		0.76
		(0.98)		(1.20)		(2.16)		(0.98)
Polarization		−1.04		−1.56		−2.18		−1.04
		(0.928)		(1.142)		(2.041)		(0.928)
Disproportionality		0.26		0.56		2.06		0.26
		(0.92)		(1.16)		(2.00)		(0.92)
Old democracy		−4.76***		−3.22*		−9.70***		−4.76***
		(1.60)		(1.96)		(3.50)		(1.60)
District magnitude		−0.88		0.24		−2.54		−0.88
		(0.76)		(1.00)		(1.70)		(0.76)
Party level								
Niche	0.26	0.52	1.44	1.64	1.14	1.60	0.26	0.52
	(1.36)	(1.38)	(2.26)	(2.24)	(2.40)	(2.40)	(1.36)	(1.38)
Governmental status	0.82	0.64	4.22**	3.42**	1.32	1.34	0.82	0.64
	(1.02)	(1.04)	(1.64)	(1.68)	(1.78)	(1.80)	(1.02)	(1.04)
Centre	2.44*	2.66*	4.96**	4.46*	2.78	3.24	2.44*	2.66*
	(1.40)	(1.42)	(2.30)	(2.36)	(2.48)	(2.48)	(1.40)	(1.42)
Right	2.22**	2.02**	4.24***	3.56**	2.34	2.26	2.22**	2.02**
	(0.899)	(0.910)	(1.478)	(1.503)	(1.585)	(1.593)	(0.899)	(0.910)
Election cycle	0.24	−0.28	0.30	−0.44	0.36	−0.28	0.24	−0.28
	(0.80)	(0.86)	(1.00)	(1.10)	(1.76)	(1.90)	(0.80)	(0.86)
Gov. status * Election cycle	−0.22	−0.88	−0.02	−1.14	−0.04	−0.78	−0.22	−0.88
	(1.04)	(1.10)	(1.40)	(1.58)	(2.10)	(2.26)	(1.04)	(1.10)
Disproportionality * Niche		0.32		−2.20		1.94		0.32
		(1.04)		(1.70)		(1.80)		(1.04)
Constant	65.70***	68.70***	60.90***	63.40***	60.14***	65.80***	65.70***	68.70***
	(1.00)	(1.40)	(1.34)	(1.88)	(2.08)	(2.92)	(1.00)	(1.40)
Observations	155	155	155	155	155	155	155	155
Random variance	10.12	7.34	6.14	6.22	57.66	42.46	10.12	7.34
Residual variance	18.10	18.30	51.86	51.42	55.36	55.48	18.11	18.30
ICC	0.36	0.30	0.12	0.12	0.50	0.42	0.36	0.30
Log Likelihood	−355.465	−345.607	−407.073	−397.061	−424.745	−409.628	−355.465	−345.607
Akaike Inf. Crit.	728.929	721.215	832.145	824.121	867.490	849.255	728.929	721.215
Bayesian Inf. Crit.	754.165	763.275	857.381	866.182	892.727	891.316	754.165	763.275

Note: *p<0.1; **p<0.05; ***p<0.01

Table 16: Mixed effects regression models - EUvox *Relative congruence*

	Dependent variable:							
	Relative congruence							
	Overall.c	Overall.cp	Economy.c	Economy.cp	Social.c	Social.cp	EU.c	EU.cp
Country level								
EFNP		0.78		1.94		0.28		0.28
		(1.24)		(1.42)		(2.96)		(1.56)
Polarization		−1.00		−0.58		−2.50		0.06
		(1.26)		(1.44)		(2.96)		(1.60)
Disproportionality		1.44		3.06**		1.52		−0.06
		(1.26)		(1.46)		(2.98)		(1.60)
Old democracy		−3.50*		1.70		−9.98**		−1.86
		(2.08)		(2.46)		(4.98)		(2.66)
District magnitude		0.98		2.36*		0.50		0.20
		(1.14)		(1.26)		(2.78)		(1.42)
Party level								
Niche	−0.38	−0.04	−1.78	−1.54	3.32	3.64	−3.30	−2.74
	(1.88)	(1.82)	(3.22)	(3.22)	(3.04)	(3.06)	(2.64)	(2.68)
Governmental status	0.64	0.44	2.58	3.20	1.08	0.76	−1.26	−1.44
	(1.46)	(1.50)	(2.52)	(2.60)	(2.42)	(2.44)	(2.06)	(2.16)
Centre	4.32**	3.90*	6.04*	4.42	0.54	0.36	6.06**	6.08**
	(2.00)	(2.04)	(3.44)	(3.54)	(3.26)	(3.30)	(2.84)	(2.90)
Right	7.14***	6.80***	7.38***	6.98***	7.24***	6.92***	6.52***	6.18***
	(1.26)	(1.28)	(2.20)	(2.24)	(2.04)	(2.06)	(1.78)	(1.82)
Election cycle	−0.06	−0.12	−1.20	−0.32	−0.04	−1.00	0.88	0.78
	(0.98)	(1.18)	(1.32)	(1.46)	(2.18)	(2.74)	(1.12)	(1.52)
Gov. status * Election cycle	1.56	1.38	1.66	2.02	1.20	0.26	2.68	2.68
	(1.38)	(1.50)	(2.10)	(2.16)	(2.68)	(3.10)	(1.76)	(2.02)
Disproportionality * Niche		−0.70		−3.64		−0.10		1.46
		(1.60)		(2.76)		(2.58)		(2.28)
Constant	68.46***	70.80***	65.86***	65.00***	62.24***	68.38***	77.32***	78.64***
	(1.26)	(1.84)	(1.90)	(2.52)	(2.60)	(4.00)	(1.60)	(2.44)
Observations	168	168	166	166	166	166	168	168
Random variance	12.14	11.10	6.54	1.28	88.16	88.70	7.66	14.76
Residual variance	52.70	53.16	165.82	167.36	134.92	134.10	109.80	109.74
ICC	0.20	0.16	0.04	0.02	0.40	0.39	0.08	0.12
Log Likelihood	−570.690	−560.795	−647.555	−634.974	−646.400	−632.169	−623.969	−615.118
Akaike Inf. Crit.	1,159.379	1,151.589	1,313.109	1,299.947	1,310.800	1,294.338	1,265.938	1,260.236
Bayesian Inf. Crit.	1,187.495	1,198.449	1,341.117	1,346.627	1,338.808	1,341.017	1,294.054	1,307.095

Note: *p<0.1; **p<0.05; ***p<0.01

the opposite is true. Hypothesis *H7a* introduces an interaction effect between the disproportionality of the electoral system and niche party status. As disportionality increases, niche parties present less congruence. The coefficients point in the right direction across the *Overall, Economy* and *Social* models, but the large standard errors suggest that we can have little confidence in the direction of the results.

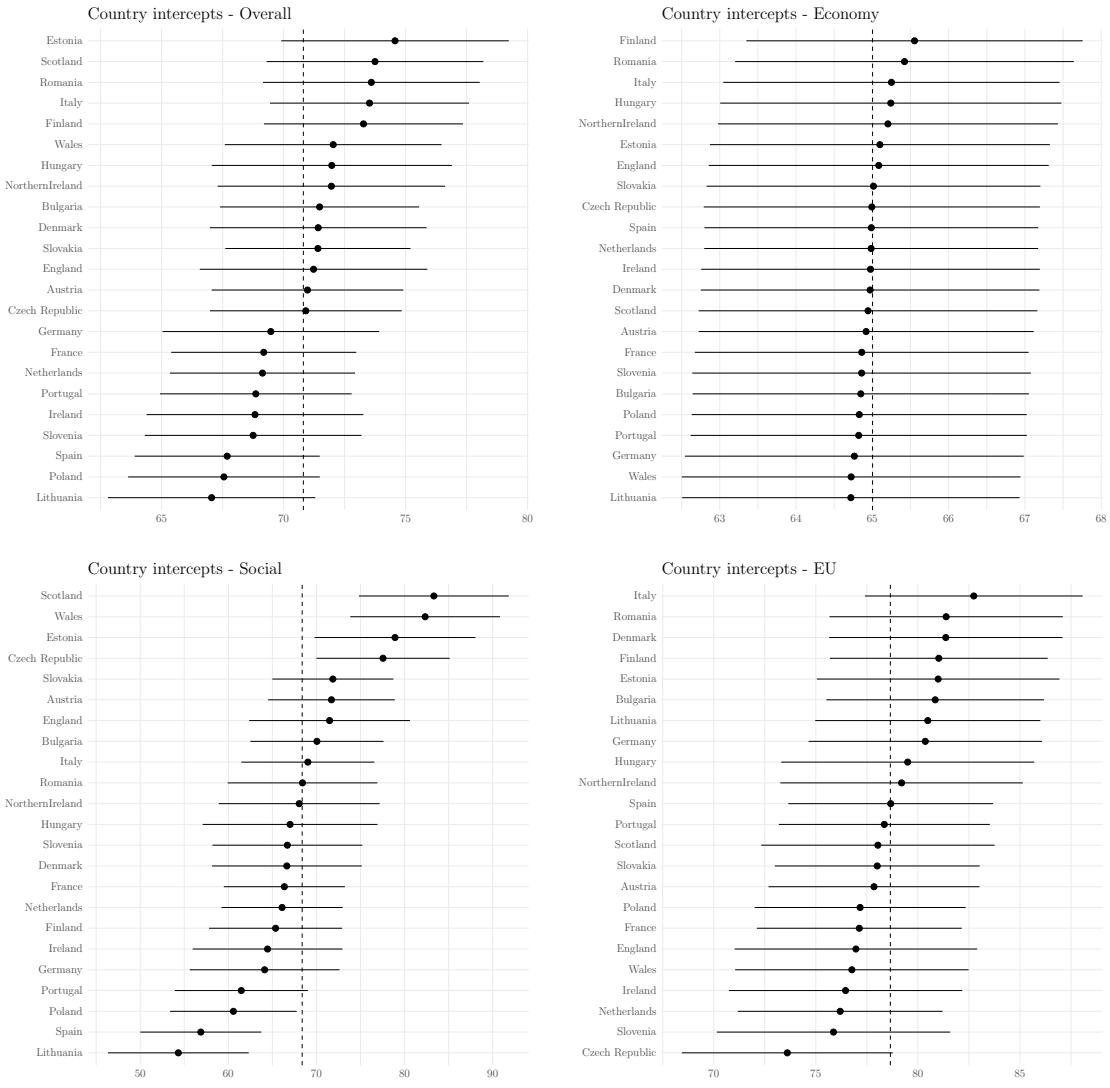

Figure 26: Density plots - EUvox Absolute citizen congruence

Hypothesis *H7b* put forward the expectation that parties in Eastern European democracies will present lower levels on congruence on social issues, but it does not find support in the data.

Going one step further, hypothesis *H8a* introduces an interaction term between governmental status and the election cycle, setting the expectation that the fur-

ther on in the election cycle governmental parties are, the less congruence they present. The effects are not found in any of the models.

As in the models with *absolute citizen congruence* the explained variance at country level decreases once more variables are introduced to the models. The only model in which adding party level variables helps to explain more random variance is the *EU.c* one.

Figure 26 on page 164 illustrates the countries' intercepts, after controlling for country and party level predictors, as presented in Table 16 on page 163. The *EU.c* model has the lowest variation in each country's intercepts, with values between 64.8 and 65.3. The highest variation is found within the *Social.c*, with countries such as Lithuania registering values as low as 54 and Scotland as high as 84. The large variation across countries within the *Social* issue area can be attributed to the nature of the issues included in this dimension, including policies on same sex marriage or immigration.

5.4 Discussion

The previous empirical chapter focused on country level characteristics, such as polarization, proportionality of the electoral system, district magnitude, number of political parties and democratic experience and their effect on congruence, assessed as *absolute citizen* and *relative* congruence. I extended the models to include party level predictors, as scholars of political representation suggested (Belchior 2013). The party level characteristics that made the focus of this section are the niche/mainstream party differentiation, governmental status, election cycle and the ideological leaning of the parties.

Niche parties are defined as parties that emphasize a limited number of issues which are usually ignored by mainstream parties (Meguid 2005). The niche parties included in the analysis are mostly from Green (Ecolo - Belgium, Die Grunen - Germany, Centerpartiet - Sweeden) and radical right (Vlaams Belang - Belgium, Lega Nord - Italy) party families. From the total number of 34 niche parties [69] that competed in the 2009 EP elections, 18 are included in the

[69]The number of niche parties competing in the EP elections of 2009 and 2014 is based on my own calculations.

data set. For 2014, from 35 niche parties, the data set includes 20. Although the effect of niche party status point in the hypothesized direction, due to the large standard error we have little confience in the direction of the relationship. Exploring the effects of niche party status, I introduced an interaction effect between niche party status and the disproportionality of the electoral system. This hypothesis is rooted on Ezrow's (2010) results, who argues that proportional systems do better in terms of representing their citizens' preferences, because the party system configuration in these systems allows for niche party competition. As a result, citizens in these systems have more political alternatives, and better chances to find a party that will represent their political preferences to a higher extent. In a similar fashion, but focusing on the EU policy dimension only, Mattila & Raunio (2006) show that niche parties represent the views of their supporters to a larger extent, compared to centrist, government parties. In the analysis based on 2009 EU Profiler data, more disproportionality corresponds to less congruence, as expected. 2014 EUvox data shows a reversed pattern, with more disproportional electoral systems presenting higher levels of congruence. However, when looking at the interaction term between the niche party status and disproportionality, the hypothesized effect is found only in 5 out of the 16 models, and predominantly in the analysis of *relative* congruence assessed with 2014 EUvox data.

The next set of hypotheses focus on governmental status and election cycle. Parties in government tend to be rather large and centrist, in order to appeal to the median citizen. By adopting a catch-all, centrist position, they lose their ideological edge. As a consequence, the agreement with their supporters on particular issues diminishes. The hypotheses set out the expectation that governmental status corresponds to lower congruence scores. The effect is found across all models in the analysis on 2009 EU Profiler data, but only in one of the models on 2014 EUvox data. This finding reinforces the results of Mattila & Raunio (2006), who also showed that government parties are less representative of their voters.

Accounting for the effect of governmental status does not suffice; as Reif (1984) suggested, the timing of the elections play an important role in the whole congruence story. Accordingly, an interaction effect was introduced, for governmental

status and election cycle. The expectation was that further on in the election cycle a governmental party is, less congruence will present. Although the results point in the hypothesized diretion (except the model based on *relative* congruence assessed with the 2014 EUvox data), they fail to reach statistical significance.

No theoretical expectations were formulated in regards to the ideological leaning of the parties. Traditionally, more congruence is found on the Left side of the ideological spectrum (Holmberg 2000), which the analysis of 2009 EU Profiler data also reflects. Parties on the Left are in closer agreement with their supporters. However, when looking at 2014 EUvox data, the effects are reversed; placement on the Right side of the ideological spectrum corresponds to more congruence. This shift may be due to the rise in support for populist right wing parties that ran in the 2014 EP elections.

After discussing the main findings of this chapter, in the next subsection I will situate them within the scholarly literature on congruence.

5.5 Conclusions

As Walgrave, Lefevere, Pepermans & Nuytemans (2009) correctly point out, in most democracies, representation is organized by political parties. Parties are the ones who present political platforms, and carry them out if elected. One of the requirements for the proper functioning of a representative democracy is that the voters cast their ballot for a party because of its political platform, and at the same time, that 'voters vote [for] the party that best represents their opinions and beliefs' (Walgrave, Lefevere, Pepermans & Nuytemans 2009, p2). Starting from this assumption, this section focused on the characteristics of political parties and their role in the match between the voters and their most preferred parties.

After running the analysis on extended models, that included party characteristics as predictors of both *absolute citizen* and *relative* congruence and discussing the results, there are three takeaway points that I will address as concluding remarks of this section.

The first point is related to niche parties and is rooted in the bias inherent in VAA data. This is the idea that the bias can be regarded as an opportunity, rather than a disadvantage. Although it does create substantial bias, over-representing

the young, better educated and those highly interested in politics, the main advantage of the VAA tool is that it reaches people whose opinions are not captured by national or cross-national surveys, such as niche party supporters. For the purpose of this chapter, it allows one to see whether there are differences in congruence scores across the type of party.

Overall, niche parties are better in promoting congruence. It may be because due to their rather narrow focus on issues, they manage to make their position on certain issues well known. As a consequence, voters can easily identify the parties that stand closer to their own political preferences. In the models where niche parties do not present more congruence, once we control for the disproportionality of the electoral system [70], the niche party status is associated with more congruence.

Another interesting finding is related to the ideological leaning of niche parties. Overall, parties on the Right side of the ideological spectrum tend to show less congruence compared to those on the Left. Once we introduce the niche/mainstream party differentiation, we notice that niche parties follow the same trend. However, in 2014 the situation changes, and only mainstream parties (assessed with *absolute citizen congruence*) fit this pattern. In the other three instances (niche parties - *absolute citizen congruence* and niche and mainstream parties *relative*), parties on the Right side of the ideological spectrum have associated higher congruence scores. This may be due to the fact that more countries are included in the 2014 data set, such as Austria, Finland, or Hungary, all with right wing parties with relatively high scores of congruence.[71] With extremist parties on the rise, there is more and more interest towards niche parties, and VAAs play an important role in capturing the preferences of niche party supporters.

The second point was briefly addressed in the previous chapter, from the perspective of country level analysis and it touches upon the differences observed across issue areas. As stressed throughout the thesis, VAA generated data, through its 30 policy issues provides a great avenue for studying issue congruence. More than that, the policy issues are classified into three issue dimensions, *Economy,*

[70] Through an interaction term

[71] Austria - FPO 74.84 Finland - Kristillidemocraatit 76.57, Hungary - Jobbik 74.75

Social and *EU*. In addition to assessing congruence on the three issue areas, also referred to as issue dimensions or issue categories, I used an *Overall* assessment of congruence, that includes all issue policies. The varying congruence scores across issue areas made me believe that an *Overall* measure of congruence, although the standard in congruence studies, would depict a distorted reality.

Regressing country and party level predictors of congruence on the three issue areas and on the *Overall* measure of congruence returned different results. Looking only at the models with *Overall* congruence, one would conclude that the predictors have the hypothesized effects across the two European elections and across the two measures of congruence employed, with the exception of *relative* congruence in 2014 EUvox data. However, looking at the models on issue dimensions, we observe a rather different reality. The *EU* models offer different results, while the *Economy* and *Social* are rather similar.

The difference in the *EU* issue area, especially in 2014 EUvox data, can be attributed to the increase in support for right wing parties, that flourished in the 2014 EP elections. This is based on the positive effect on congruence of Right ideological leaning. This reinforces the advice given by Dalton (1985, 2017*b*) that political representation scholars should take a multidimensional approach when studying congruence.

The third and last point touches upon the different approaches used to measure congruence in this thesis, the *absolute citizen* and *relative* measures. Throughout the thesis I have argued that a *relative* measure of congruence, one that takes into account the distribution of citizens' congruence scores is superior to an *absolute* measure, that is focused on the median citizen. However, the analyses conducted in this section, centered on party level predictors, as well as the on extended models which includes country and party level characteristics, offer rather similar results, but less so on the *EU* issue area.

What sets the *EU* issue area apart is the fact that parties are more similar to their supporters on EU related topics. In both 2009 EU Profiler and 2014 EUvox data, the *EU* issue area has on average the highest congruence scores, for both the *absolute citizen* and the *relative* measure. For both data sets, the 2009 EU Profiler and 2014 EUvox, the *relative congruence* approach offers a

more positive image of congruence, with an average 5 point difference between the two measures, across all issue areas. More than that, on the *EU* issue area niche parties have on average higher scores than mainstream parties, even though the differences are more modest in the 2009 EU Profiler data. The niche party category accommodates the radical right parties and their anti-EU character. The fact that parties are more congruent with their supporters on EU topics comes as no surprise, given the surge in support the radical right parties competing in the EP elections of 2014 have known. Furthermore, the ideological leaning on the right is positively associated with both measures of congruence. Any other differences between the two data points can be attributed to the samples, as the 2014 EUvox data set includes the new democracies of Central and Eastern Europe.[72] In an analysis on the congruence of opinions in the EU dimension, Mattila & Raunio (2006) show that citizens in the new EU member states (who are also CEE countries) are better represented by their parties than those in older EU democracies. They attribute this difference to the central role the EU occupies in the agendas of new EU member states (Mattila & Raunio 2006). These differences reinforce the point made by (Golder & Stramski 2010) and suggest that the way we assess congruence may lead to different results.

Including party level predictors did not help explain a larger proportion of variation across countries. It did however shed light on the performance of niche parties in promoting more congruence, compared to mainstream parties. In order to get a more complete picture and one often overlooked by the scholars of political representation due to the lack of an analytical framework, in the next section I will focus on individual characteristics as predictors of congruence.

[72]These countries were excluded from the 2009 EU Profiler data set due to the small number of cases, that did not allow for congruence scores to be calculated.

6 Individual level predictors of congruence

'[...]ultimately, it is the voter who evaluates the policy offers of parties on the electoral market and it is the voter who decides to vote for a party that does, or does not, match her preferences. Disaggregating the issue congruence puzzle to the individual voter level may be the best strategy to make progress in this field.' - Walgrave & Lefevere (2013)

6.1 Introduction

As Walgrave & Lefevere (2013) point out, at the centre of political representation, one finds the voter. It is the voter who assesses the political promises of parties, that casts a vote, then evaluates the performance of her most preferred party and either rewards or punishes the party in the following elections. Seen as a cycle, the action of choosing a party and casting a vote has the voter as a central element. Ultimately, it is the voter who matches her preferences with those of a party. As a consequence, we should know more not only about the voter's political preferences, but also about the individual features of the voter that may play a role in explaining congruence.

The long tradition of political representation provides explanations for congruence by focusing on either the system or party level. Until recently, research on congruence systematically overlooked the individual level characteristics that can play a role in explaining the congruence puzzle. This brings me to the first point addressed in this section, namely the need to account for individual level attributes in explaining congruence.

As emphasized in both the introductory and the theoretical chapter, the vast majority of the studies on congruence focus on a single level of explanation,

such as features of the political parties or of electoral systems. The individual level predictors of congruence are systematically neglected, with one notable exception, Walgrave & Lefevere (2013) and to a smaller extent Steenbergen et al. (2007). Walgrave & Lefevere (2013) argue that individual policy incongruence is an area that was previously ignored due to lack of data. The development of the VAA field came to cover this gap, as VAA generated data provides the perfect grounds for delving into individual level predictors of congruence. In addition to information on the users' political preferences, the VAA tool captures the individuals' voting intention, as well as socio-demographic attributes that can be used in attempting to explain congruence.

The second point I am addressing is related to niche party supporters. Throughout the empirical chapters, I have emphasized the main advantage of VAA generated data, namely the users it attracts. Oftentimes interpreted as a disadvantage, the bias inherent in VAA data can be seen as an opportunity to study groups who are under-represented in traditional survey tools. In this section, I will look into the differences between niche and mainstream party supporters, as captured by VAA data. In what follows, I will briefly restate the working hypotheses that make the focus of this chapter.

The current section is centered on individual level characteristics in relationship with congruence, assessed as an *absolute citizen* measure. As I emphasized throughout the sections, VAA generated data present a major source of bias, with the young, those from urban areas, highly educated, and those highly interested in politics individuals being over-represented. However, it is exactly this bias that allows VAA researchers to address issues focusing on these specific individuals, whose preferences are often not captured by traditional mass surveys. Often times, this is the profile of a niche party supporter: with high education and highly interested in politics, cosmopolitan and with libertarian values.[73] I explored the characteristics of niche parties and their effect on congruence in the previous section. The analyses centered on country and party level predictors did not shed light on the entire congruence puzzle, with only isolated effects at

[73]This fits the profile of a Green party supporter, rather than the one of a radical Right party, where the profile of a supporter is illustrated by individuals with less education, from lower strata of the society McGann & Kitschelt (2005)

both levels of analysis. Now, it is time to turn my attention towards a lower level of analysis, namely individual level predictors.

Placing the voter at the center of the representation process requires that we know the role played by voters' characteristics in explaining congruence. Most studies suggest that the congruence between voters and parties is low. The most common explanation for this lack of congruence is represented by a low interest in politics, as well as inconsistent preferences[74] and misinformation[75] on the voters' part. However, this misalignment between the preferences of voters and parties is mostly assessed using ideological and not issue congruence. My attempts to explain the congruence puzzle at country and party level did not prove successful, meaning that the country and party level predictors did not explain much of the variation in congruence scores. I will now turn my attention towards individual level characteristics, placing the voter at the centre of the process of political representation. The analysis in this section will allow me to identify who is better represented.

6.1.1 Hypotheses

As previously emphasized, most of the vast scholarly literature on political representation provides explanations for congruence at a single level of analysis, country or party level. Oftentimes, characteristics of both are included, because drawing a line between the effect of institutional factors and electoral systems is extremely difficult. Furthermore, the number of studies that include individual level characteristics as predictors of congruence is rather limited (Walgrave & Lefevere 2013). The small area of studies that examine the effect of individual characteristics in relationship with congruence, focus on educational attainment and political interest. Walgrave & Lefevere (2013) found that highly educated and more politically interested individuals are less likely to be incongruent with

[74]Following Converse & Pierce's (1986) theory on integrated belief systems, the lack of consistency of voters' political preferences makes it difficult for them to make a vote choice, even more a 'correct' one (voting for the party that best matches the voter's preferences) (Lau & Redlawsk 1997).

[75]Because VAAs follow a spatial modeling approach, it is worthwhile mentioning that with this approach, a rational voter takes only policy preferences into account when making a vote choice. Also, this view assumes that a by doing so, a rational voter will vote 'correctly' (Walgrave et al. 2016).

their most preferred party. The expectation is that those more knowledgeable about politics will be more congruent with their most preferred party. Because education works as a mediator between knowledge and congruence, I hypothesize that: *H9: Individuals with higher educational attainment present higher levels of congruence with their preferred political party.* A slightly different line of studies, focusing on the representation of sub-groups show that there is inequality in representation generated by income. More precisely, that policy tends to represent the wealthier electorate (Soroka & Wlezien 2008). Similarly, that policy is most responsive to the preferences of the better educated. From this perspective, those with better education are more congruent with their most preferred party because the parties aims to represent this demographic subgroup.

The argument initiated above, mentioning knowledge, can be extended to political interest. More precisely, those with an interest in politics are more knowledgeable about politics and lastly are more likely to participate in politics Powell (1986). *H10: Individuals with higher levels of interest in politics present higher levels of congruence with their preferred political party.* Ezrow (2010) argues that niche parties improve representation in a party system by offering more channels of representation. What Ezrow (2010) means by 'more channels of representation' is simply more parties, and consequently, a larger political offer. Given the nature of niche parties, issues such as immigration or ecology are pushed into the political agenda, offering voters a wider range of political options. Giger & Lefkofridi (2014) has shown that on salient issues, policy congruence is higher between niche parties and their supporters. The analysis of the previous chapter revealed that niche parties are also more congruent with their supporters. After studying the effect of niche parties as a party characteristic, in this chapter I focus on niche parties as an individual attribute. More precisely, I examine the effect that being a niche party supporter has on congruence. Given the results of previous studies and the results of the previous empirical chapter, the expectation is that: *H11:* Niche party supporters are more congruent with their most preferred party, compared to mainstream party supporters. Before going into describing and analyzing data, I must address the implications of the bias inherent in VAA data for the analysis at the individual level. If those who are congruent are over-represented, it means that the size of the effects must be taken with a

grain of salt. More precisely, population estimates would be smaller.

6.1.2 Data

As in the previous two chapters, data from the 2009 EU Profiler and 2014 EUvox are used to assess congruence and to test the effect of its predictors. The hypotheses presented above are tested on both data sets.[76]. Congruence between the VAA users and their most preferred party expressed as vote intention is assessed as *absolute citizen* congruence and it is measured at an individual level. The *relative* measure of congruence used in the previous two sections was assessed at a party level and therefore it is not included in the analysis at the individual level. The structure of the analysis is similar to the approach within the previous two chapters. I start by examining *absolute citizen* congruence using data collected through 2009 EU Profiler, and then I use the same modeling strategy on 2014 EUvox data.

6.2 2009 EU Profiler - *Absolute citizen congruence*

Throughout the thesis I stressed the advantages VAA data presents, in terms of having individuals and parties express their positions on the same set of issues. Another aspect that makes these kind of data unique is represented by the public who use VAA tools. Although open to the wide public, the access to a VAA tool is restricted by Internet access and Internet literacy, and then mediated by political interest. Discussing the bias inherent in VAA data, I mentioned that VAA users tend to be young, mostly male, highly educated and highly interested in politics (Garzia & Marschall 2012). In what follows, I will explore the distribution of individual characteristics of VAA users, to see whether it follows the pattern illustrated in VAA research and discussed extensively in the introductory chapter.

Figure 27 presents the distributions of individual level characteristics, that are a focal point of this chapter. The distributions show the patterns described in VAA studies (Garzia & Marschall 2012). As previously shown by Garzia & Marschall (2012) and Alvarez, Levin, Trechsel & Vassil (2014) among many, the

[76]Due to data limitations, the 2009 EU Profiler data set includes 11 countries (Belgium is split between Flanders and Wallonia), while the 2014 EUvox contains 24 countries

VAA users tend to be young, with two third of the respondents in the first two age categories (18 to 29 and 30 to 49). The predominant gender is male, with only one third female respondents. Furthermore, the respondents report high levels of educational attainment, approximately two thirds reported higher and postgraduate education. Lastly, the vast majority of respondents reported high levels of political interest.

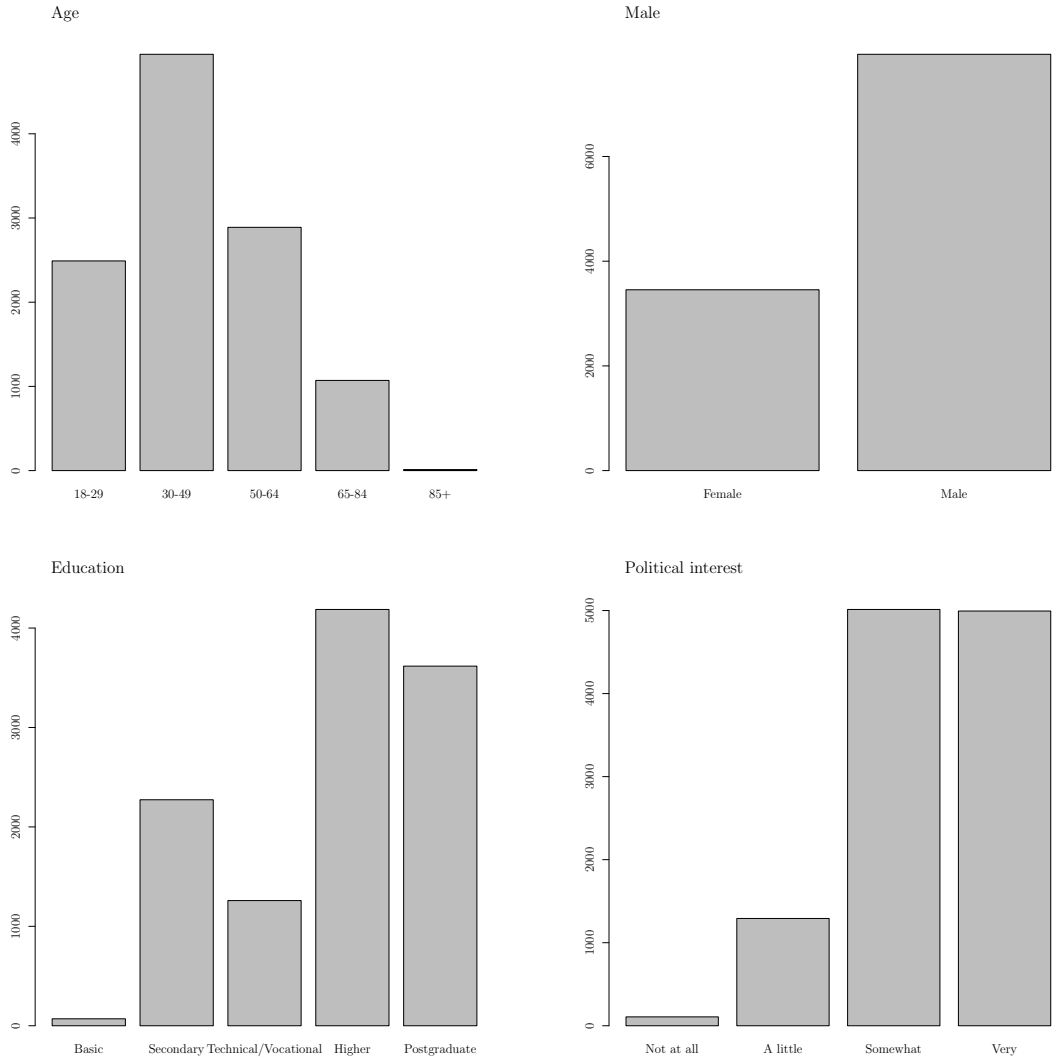

Figure 27: Individual level characteristics - EU Profiler

These results indicate that the distribution of individuals' characteristics are in line with previous findings of VAA research, where users tend to be mostly male, rather young, better educated, and highly interested in politics.

6.2.1 Preliminary findings - 2009 EU Profiler

In what follows, I will present some of the preliminary findings leading to the regression models. I start by exploring the bivariate distribution of individual level characteristics and congruence scores, assessed as *absolute citizen congruence*, using violin plots.[77] I will start with age, gender, educational attainment and political interest. Figure 28 presents the distribution of congruence scores across age categories. Younger users tend to present higher levels of congruence (in the 18-29 age category, the median value of congruence is 75, while in the 65-84 years, the median is 70). The last age category (85+) also registers the lowest congruence scores.

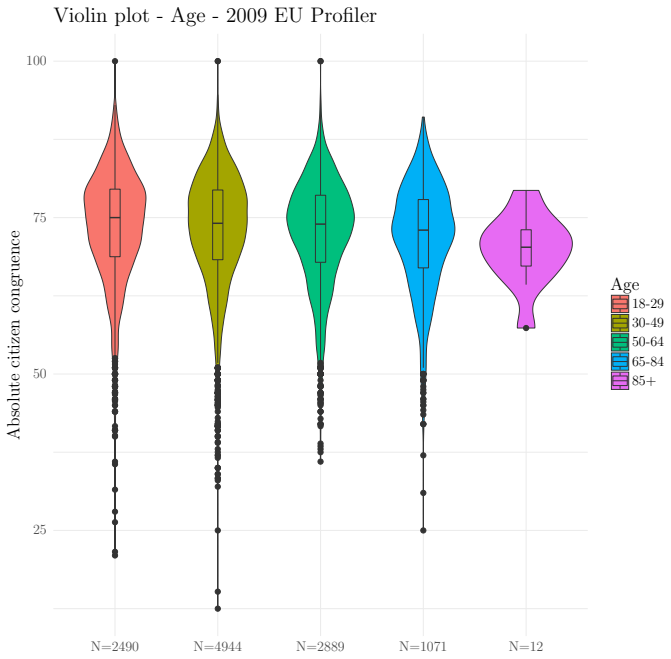

Figure 28: Age - EU Profiler

Figure 29 illustrates the distribution of *absolute citizen* congruence scores for gender catgories. The distribution of congruence scores agross genders is rather similar, with medians close to 75 for both categories.

Studies on the profile of VAA users have shown that they tend to report higher levels of educational attainment than the general population (Garzia & Marschall

[77] Violin plots are a combination of boxplots and kernel density plots and are used to represent comparisons of the distribution of one variable across different categories. In addition to presenting information on the median value and the interquartile range, it shows the full distribution of the data, with rotated kernel density plots on each side.

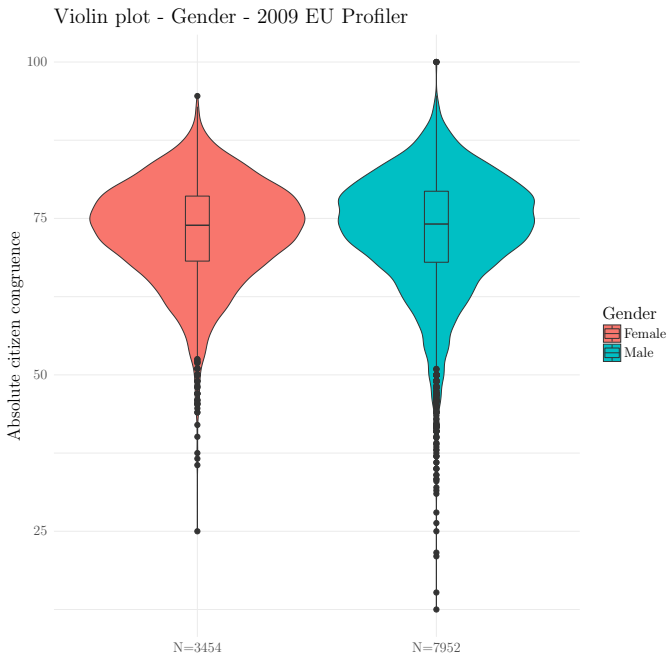

Figure 29: Gender - EU Profiler

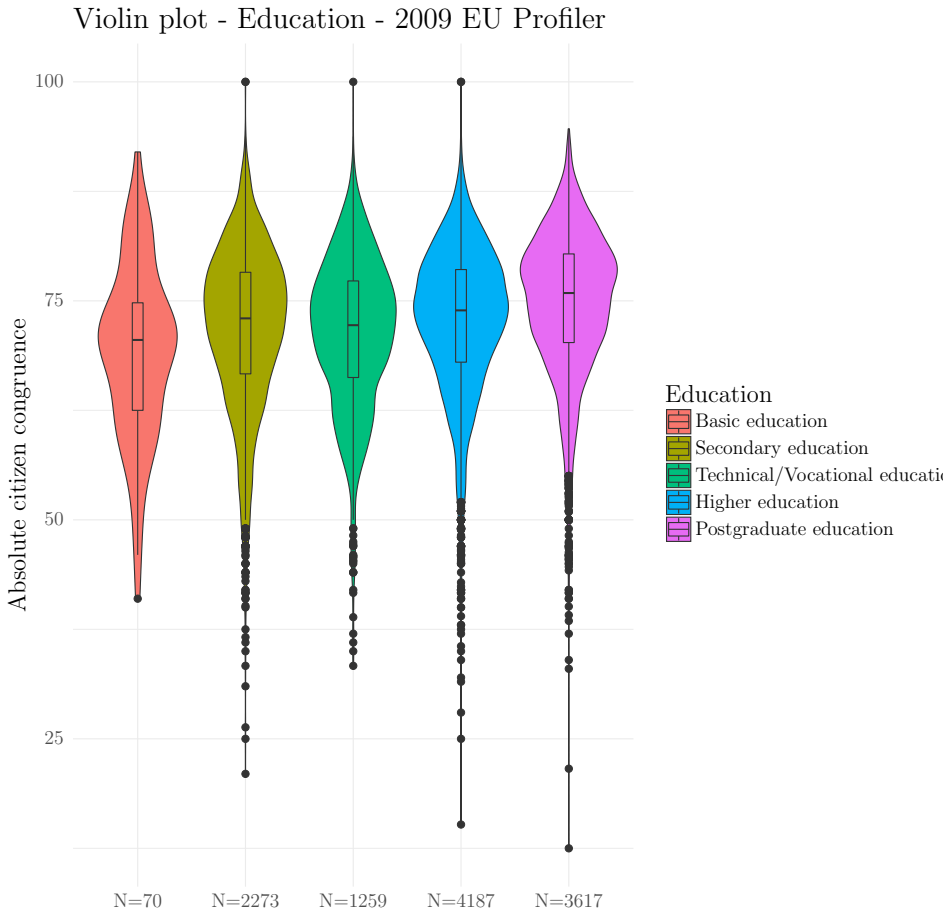

Figure 30: Education - EU Profiler

2012). One can notice that as we move towards the higher education categories, the median of congruence scores increases slightly, from 71 for those in secondary education to 80 for those with postgraduate studies. In other words, an increase in education is associated with more congruence.

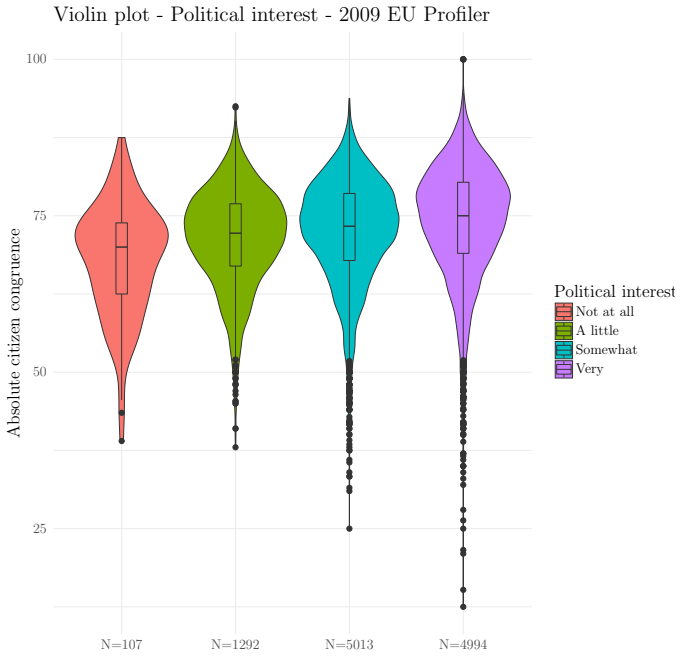

Figure 31: Political interest - EU Profiler

Figure 31 shows the distribution of *absolute congruence* scores across categories of political interest. One can notice that moving from *not at all interested* to *very interested* in politics, the median value of congruence scores increases.

Figure 32 shows that niche party supporters are in higher levels of agreement with their most preferred party, compared to mainstream party supporters. The violin plots suggest associations between *absolute citizen* congruence and age, educational attainment and interest in politics. These associations can be treated as preliminary hypotheses tests.

6.2.2 Results - EU Profiler

The central expectations of this section are that education, political interest and being a niche party supporter explain the level of agreement between the voter and her most preferred party. The agreement is assessed as *absolute citizen congruence*. Due to nesting in the data, with parties being nested within countries, a hierarchical modeling approach is the most suitable method. After extending

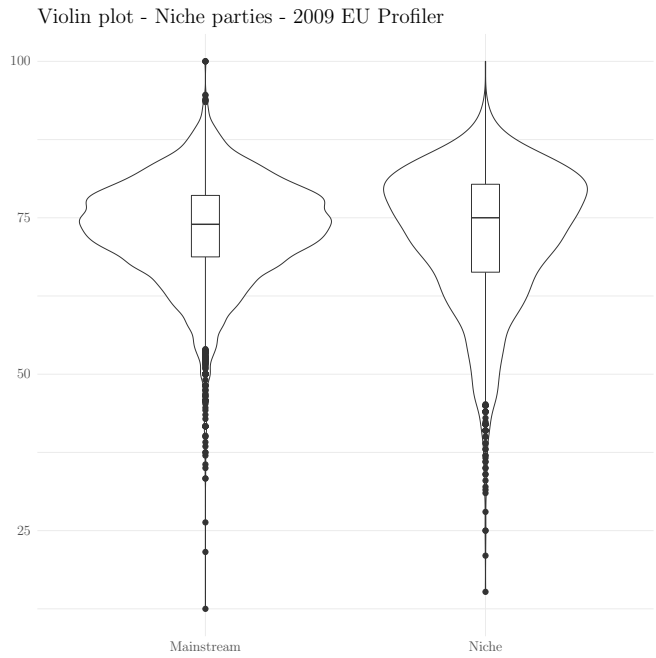

Figure 32: Niche party supporters - EU Profiler

the model to include individual level predictors in addition to system and party level ones, it becomes:

$$y_{ijk} = \alpha_{ijk} + \beta_1 EFNP_k + \beta_2 Disproportionality_k + \beta_3 DistrictMagnitude_k$$
$$+\beta_4 Polarization_k + \beta_5 OldDemocracy_k + \epsilon_i + \beta_6 Niche_j + \beta_7 GovernmentalStatus_j$$
$$+\beta_8 ElectionCycle_k + \beta_8 Left/Right_j + \beta_9 Age_i + \beta_1 0 Male_i$$
$$+\beta_1 1 Education_i + \beta_1 2 Politicalinterest_i + \beta_9 ExtremeRiLe_i + +\epsilon_i \quad (5)$$

and $\alpha_i = \mu_\alpha + \eta_i$. In the preliminary analysis, I fitted four mixed effects models, focusing solely on the individual level characteristics. I do this to examine the effect of individual level characteristics without accounting for party or country level predictors. Figure 33 on page 33 presents the fixed effects plots for each of the four models. The fixed effects plots[78], contain information on the regression coefficients and a 95% confidence interval around them. The effects of individual level characteristics vary slightly across models. Males tend to be more congruent with their most preferred party, but less so on the *Social* issue area. Overall, the

[78]The fixed effects plots are created from mixed effects models with *absolute citizen congruence* as dependent variable and individual level characteristics as independent variables. The tables with the mixed effects models are found in Appendices, page 253, Table 39

effects of individual level predictors are rather similar across the four models.

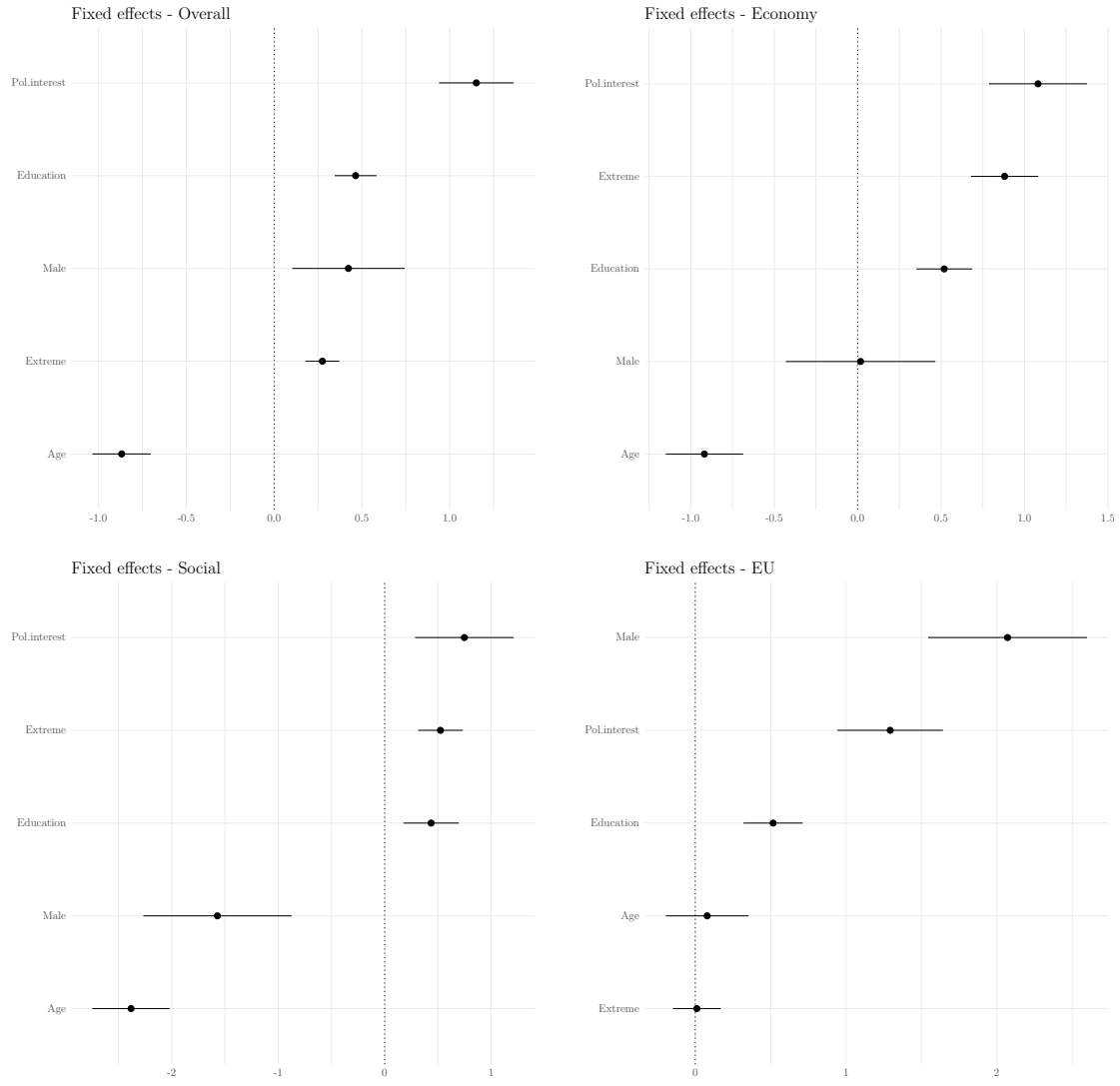

Figure 33: Fixed effects - EU Profiler

The regression model below is an extended version of the model from the previous two chapters, now including individual level predictors, such as age, gender, education, political interest, self-placement on the Left-Right scale and support for a niche party. As in the previous chapter, an interaction term between the disproportionality of the electoral system (LSq) and niche party status is introduced in the model, as well as one between governmental status and the election cycle. As in the previous chapters, the small number of majoritarian electoral systems in the data set prevents me from treating the electoral systems as PR or majoritarian systems. As a consequence, I use the measure of disproportionality to account for this difference.

Table 17: Mixed effects regression analysis - EU Profiler

	Dependent variable:			
	Absolute citizen congruence			
	Overall.ipc	Economy.ipc	Social.ipc	EU.ipc
Individual level				
Age	−0.864***	−0.976***	−2.382***	0.085
	(0.083)	(0.103)	(0.181)	(0.137)
Male	0.420***	0.077	−1.565***	2.051***
	(0.160)	(0.199)	(0.348)	(0.264)
Education	0.466***	0.458***	0.438***	0.518***
	(0.060)	(0.074)	(0.130)	(0.098)
Political interest	1.151***	1.221***	0.743***	1.300***
	(0.106)	(0.132)	(0.232)	(0.175)
Extreme L-R	0.276***	0.395***	0.520***	0.014
	(0.048)	(0.060)	(0.105)	(0.079)
Niche	1.411	2.327*	2.655	−0.087
	(0.952)	(1.196)	(2.075)	(1.655)
Party level				
Governmental status	1.812	0.664	0.323	4.270**
	(1.158)	(1.455)	(2.522)	(2.016)
Centre	−0.773	−1.142	−0.708	1.415
	(1.141)	(1.435)	(2.568)	(2.008)
Right	−2.794***	−3.375**	−3.995*	−0.943
	(1.076)	(1.352)	(2.404)	(1.886)
Election cycle	−2.376*	−0.546	−5.214	−4.377*
	(1.253)	(1.627)	(3.555)	(2.385)
Governmental status * Election cycle	−0.049	1.529	−4.414	−0.840
	(1.693)	(2.167)	(4.334)	(3.102)
Country level				
EFNP	0.553	−0.848	2.519	2.200
	(0.866)	(1.122)	(2.443)	(1.645)
Polarization	−1.510	−0.503	−3.640	−1.679
	(1.121)	(1.455)	(3.136)	(2.105)
Disproportionality	−1.349	−0.973	−3.755	−1.155
	(1.190)	(1.545)	(3.334)	(2.239)
Old democracy	5.849*	7.333*	13.275	−0.170
	(3.250)	(4.208)	(8.937)	(6.069)
District magnitude	−0.872	−0.183	−3.493	−1.052
	(0.921)	(1.194)	(2.591)	(1.748)
Disproportionality * Niche	0.543	−0.312	3.010	1.754
	(0.844)	(1.060)	(1.835)	(1.473)
Constant	64.548***	63.278***	63.000***	66.082***
	(3.166)	(4.093)	(8.630)	(5.888)
Observations	11,406	11,405	11,328	11,345
Random variance party	13.20	20.84	60.94	20.84
Random variance country	2.83	4.96	27.50	4.98
Residual variance	56.38	87.02	266.45	87.02
ICC party	0.18	0.18	0.18	0.18
ICC country	0.04	0.04	0.08	0.04
Log Likelihood	−39,157.740	−41,600.300	−47,751.910	−44,725.790
Akaike Inf. Crit.	78,357.480	83,242.600	95,545.820	89,493.580
Bayesian Inf. Crit.	78,511.660	83,396.770	95,699.850	89,647.640
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 17 on page 182 presents the results of mixed effects models with *absolute citizen congruence* as dependent variables. The models *Overall.ipc, Economy.ipc, Social.ipc* and *EU.ipc* are extended versions of the models from the previous chapter, that tested the effect of country and party level predictors of congruence. The models were extended to include individual level predictors, such as age, gender, education, political interest and self-placement of the Left-Right scale.

Moving to the interpretation of mixed effects models from Table 17, hypothesis *H9* put forward the expectation that having more education corresponds to presenting higher levels of congruence, and *H10* suggests that higher political interest corresponds to more congruence. Both hypotheses are supported, having positive and statistically significant coefficients. More precisely, moving from one category of educational attainment to a higher one is associated with an increase in congruence. The effects are very similar across the models (0.44 in the *Economy.ipc* and 0.52 in the *EU.ipc* model). The effect of political interest is highest in the *EU.ipc* model, where moving from *somewhat* to *very interested* in politics leads to an increase of 1.26 points in congruence scores.

Hypothesis *H11* put forward the expectation that niche party supporters are more congruent with their most preferred party. The hypothesis finds support across the models, except for the *EU.ipc* one.

Although no theoretical expectations were set in relationship with age, the results of previous studies suggest that older people are less incongruent with the party they intend to vote for in the upcoming elections (Walgrave & Lefevere 2013). The results of the mixed effects models suggest that an increase in age does not correspond to an increase in congruence, contrary to previous findings. In other words, younger people are more congruent with their most preferred party; moving from one age category to another, the congruence on *Social* issue area decreases which was 2.4. A slightly smaller effect is found in the *Economy.ipc* model. The effect of age on congruence is similar in direction and statistically significant across all models, except the *EU.ipc* one.

Turning to another individual characteristic, gender, the results suggest that males are more congruent with their most preferred party on the *Economy* and *EU* issue dimensions. The magnitude of the effects vary, with larger effects found

in the *EU.ipc* model, where 2.4. However, the results of the *Social.ipc* model suggest that males are less congruent with their most preferred party when it comes to social issues. It is not surprising that women are in higher agreement with their most preferred party on Social issues, as this issue dimensions covers topics such as abortion and crime.

Focusing on the effect of ideological self-placement on the Left-Right scale, more precisely on placing oneself towards the extreme of the ideological scale, the results suggest that those on the exteremes of the political spectrum are in more agreement with their most preferred party. The direction and magnitude of the effects is similar across the models, but the effect is very modest in the *EU.ipc* model.

The effect of country level predictors stays fairly constant once the individual level predictors are added to the models. The effect of party level predictors is less stable, especially for governmental status and self-placement on the Left-Right scale variables. The *Economy.ipc* model is the only one where the effect of the aforementioned variables changed direction and magnitude, although most country and party level predictors lose their statistical significance once individual level predictors are included in models.

Table 39 in the Appendices, page 253 presents the baseline models with *absolute citizen congruence* assessed at the individual level. Comparing the ICC of the baseline models with those of the extended models from Table 17, there is a slight decrease in both party and country level ICC. What this means is that as individual level characteristics are accounted for, there is less variability across observations from different countries. However, there is more variation accounted for by the clustering at party level.

6.3 2014 EUvox - *Absolute citizen congruence*

As with the 2009 EU Profiler data, I will start by describing the individual level variables, such as age, gender, level of educational attainment and political interest. Due to data limitations, the 2014 EUvox data does not include a variable on the ideological self-placement, 'Extreme'.

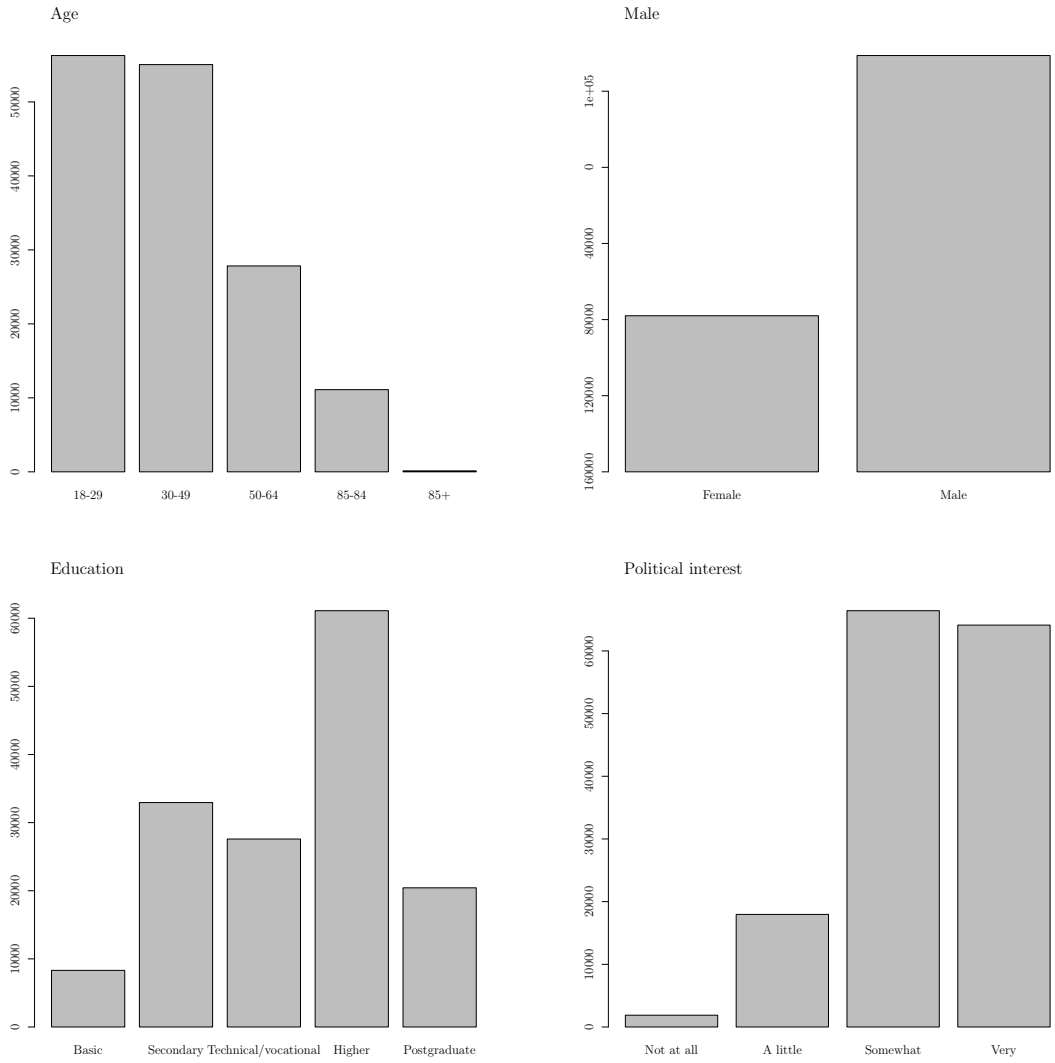

Figure 34: Individual level characteristics - EUvox

Figure 34 presents the distributions of individual level characteristics, that make the subject of this chapter. As in the analysis of the 2009 EU Profiler data, most the respondents are young and predominantly male. They report high levels of educational attainment and political interest.

6.3.1 Preliminary findings - 2014 EUvox

Before testing the effect of individual level predictors on *absolute citizen congruence*, I start by examining these relationships using violin plots. Figure 35 presents the distribution of congruence scores across age categories. In contrast to 2009, the median congruence values increase with age, which is rather unexpected. In other words, older people are more congruent with their most preferred party. However, the increase across age categories is rather small, and

it decreases when we look at the highest age category (85+). The distribution of VAA users across educational attainment categories from Figure 37 shows that an increase in educational attainment is associated with an increase in congruence scores.

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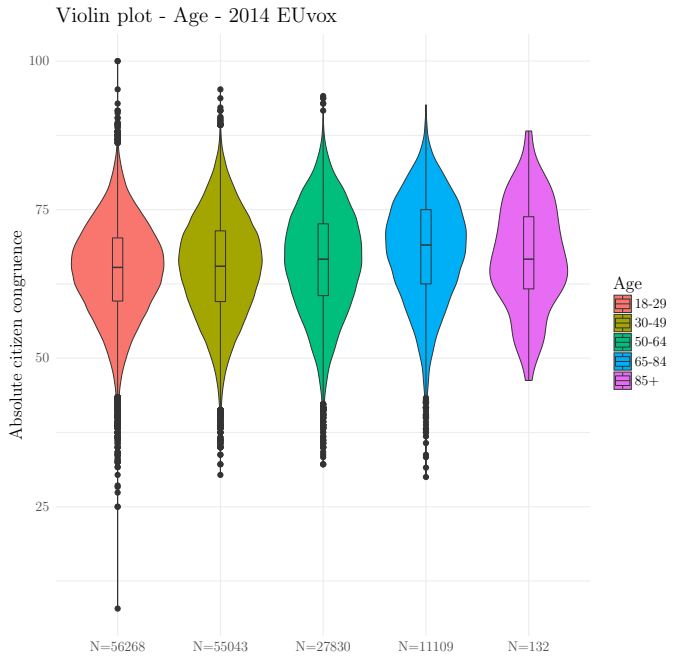

Figure 35: Age - EUvox

Figure 36 shows the distribution of *absolute citizen* congruence scores across gender categories. Similar to the analaysis of 2009 EU Profiler data, the difference in congruence scores across genders is rather small, with both groups registering most values around 65.

Figure 38 presents the distributions of political interest and *absolute citizen congruence* scores. As political interest increases, so does the median value of congruence scores.

Figure 39 presents the distributions of *absolute citizen congruence* scores across niche and mainstream party supporters. Niche party supporters present slightly higher levels of congruence than those who support mainstream parties. These associations represent preliminary hypotheses tests. In the next subsection, I will test the hypotheses outlined in the beginning of the section using mixed effects models, while controlling for party and country level predictors.

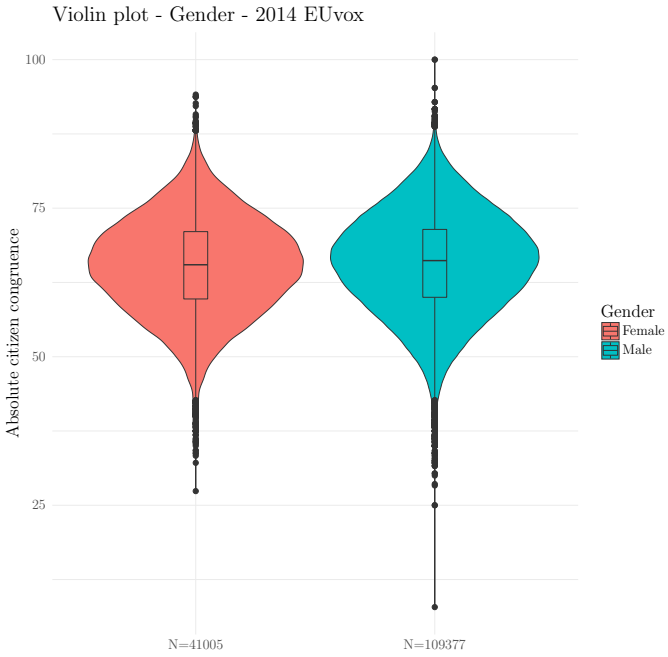

Figure 36: Gender - EUvox

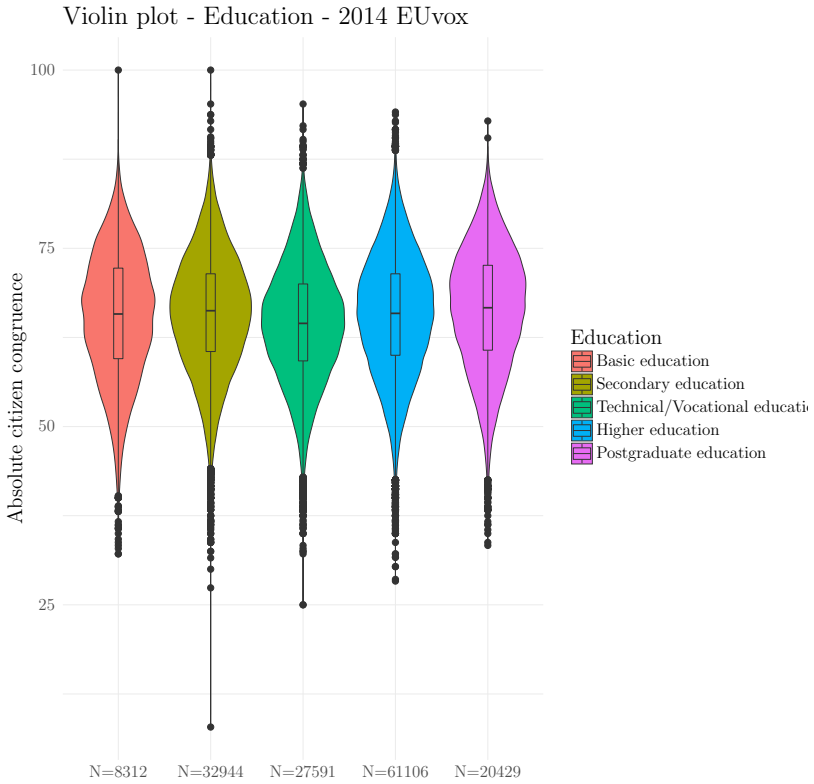

Figure 37: Education - EUvox

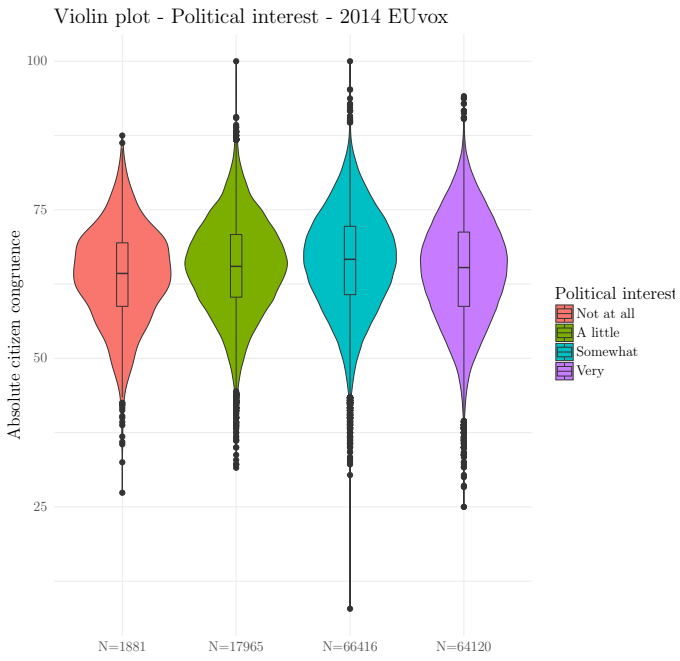

Figure 38: Political interest - EUvox

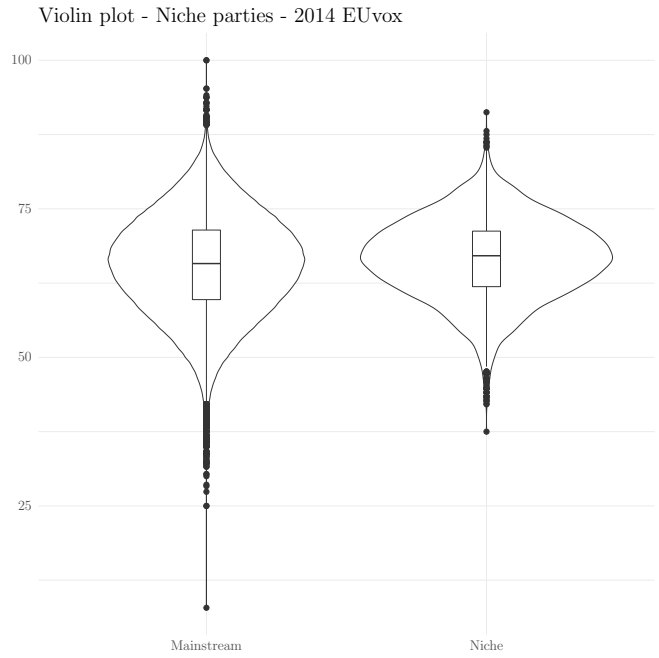

Figure 39: Niche party supporters - EUvox

6.3.2 Results - 2014 EUvox

As with the analysis of the 2009 EU Profiler data, I am first examinining the effects of individual level predictors on congruence, before testing their effects within the extended mixed effects models. Figure 40 presents the coefficients of the predictors of congruence across the models and their 95% confidence intervals. The effect of political interest is not consistent across the models, having a negative effect in the *Economy.ipc* and *Social.ipc* models, but a positive effect, as hypothesized, in the *EU.ipc* one. I will discuss the effects of the other individual level preditors within the extended regression models below, as the direction and magnitude of the effect does not vary much between the extended models and those based solely on inidvidual level predictors.

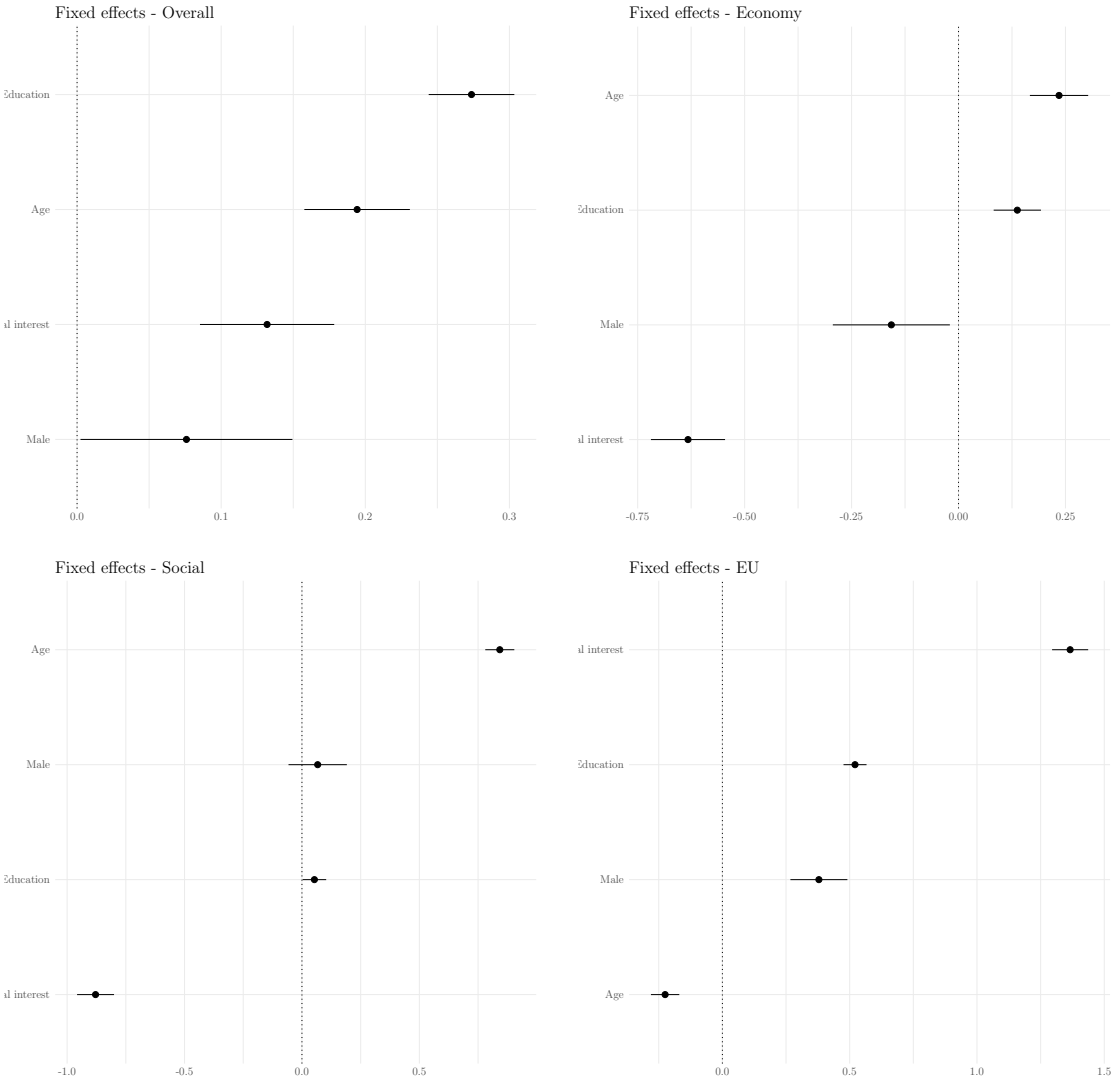

Figure 40: Fixed Effects - EUvox

Table 18 on page 191 presents the results of mixed effects models with *absolute citizen congruence* assessed with the help of 2014 EUvox data as dependent variables. The models *Overall.ipc, Economy.ipc, Social.ipc* and *EU.ipc* are extended versions of the models from the previous chapter, and include individual level predictors, such as age, gender, education and political interest.[79]

Hypothesis *H9* put forward the expectation that individuals who report higher levels of educational attainment are more congruent with their most preferred party. The hypothesis is confirmed across all models, but with varying effect magnitudes. The most modest results is found in the *Social.ipc* model, where an increase from one education category to another leads to an increase in the congruence score of 0.04. Education seems to matter slightly more when it comes to *EU* issues, where we find an increase of 0.52 points.

Hypothesis *H10*, focusing on the effect of political interest is confirmed only in the *Overall.ipc* and *EU.ipc* model, where moving from being *somewhat* to *very interested* in politics leads to an increase in the congruence score of 1.38. In the *Economy.ipc* and *Social.ipc* models, the effect is reversed, suggesting that more interest in politics corresponds to less congruence on *economic* and *social* issues, although the magnitude of the effects is rather small.[80]

Hypothesis *H11* put forward the expectation that niche party supporters are more congruent with their most preferred party, compared to mainstream party supporters. The coefficients work in the expected direction for the *Economy.ipc* and *Social.ipc* model, but fail to reach the conventional threshold of statistical significance. However, the results of the *EU.ipc* model suggest that being a niche party supporter corresponds to being in less agreement with the most preferred party on EU topics.

No theoretical expectations were set in relationship with age, but as mentioned above, previous studies suggest that older people are more congruent with the party they intend to vote for (Walgrave et al. 2016). The results of the mixed effects models suggest that an increase in age does corresponds to an increase in congruence. The effect is found across all models, except the *EU.ipc* one,

[79]The baseline models and the models focusing only on the individual level predictors can be found in Appendices, page 257, Table 40.

[80]-0.62 in the *Economy.ipc* model and -0.88 in the *Economy.ipc*model.

Table 18: Mixed Effects Models with individual level predictors - EUvox

	Dependent variable:			
	Absolute citizen congruence			
	Overall.ipc	Economy.ipc	Social.ipc	EU.ipc
Individual level				
Age	0.194***	0.235***	0.842***	−0.225***
	(0.018)	(0.034)	(0.031)	(0.028)
Male	0.076**	−0.158**	0.067	0.379***
	(0.037)	(0.068)	(0.062)	(0.056)
Education	0.274***	0.138***	0.053**	0.521***
	(0.015)	(0.028)	(0.025)	(0.023)
Political interest	0.132***	−0.632***	−0.879***	1.366***
	(0.023)	(0.043)	(0.039)	(0.035)
Niche	0.291	1.674	1.234	−0.830
	(1.347)	(2.217)	(2.419)	(1.529)
Party level				
Governmental status	0.366	2.953	1.077	−0.780
	(1.117)	(1.814)	(2.017)	(1.236)
Centre	2.913**	5.111**	3.033	2.423
	(1.411)	(2.342)	(2.524)	(1.631)
Right	2.072**	3.542**	2.182	1.188
	(0.890)	(1.469)	(1.597)	(1.016)
Election cycle	−0.287	−0.442	−0.279	−0.149
	(0.644)	(0.810)	(1.392)	(0.478)
Governmental status * Election cycle	−0.668	−0.923	−0.625	−0.581
	(0.819)	(1.153)	(1.664)	(0.736)
Country level				
EFNP	0.829	1.524	1.947	−0.174
	(1.059)	(1.305)	(2.306)	(0.754)
Polarization	−0.857	−1.316	−1.917	−0.008
	(0.794)	(0.986)	(1.726)	(0.574)
Disproportionality	0.235	0.511	2.121	−1.056
	(0.957)	(1.217)	(2.052)	(0.721)
Old democracy	−4.789***	−3.171	−9.700***	−2.475**
	(1.580)	(1.956)	(3.434)	(1.138)
District magnitude	−0.358	0.045	−0.973	−0.097
	(0.295)	(0.369)	(0.639)	(0.217)
Disproportionality * Niche	0.396	−2.213	2.082	0.270
	(1.056)	(1.745)	(1.893)	(1.209)
Constant	66.864***	63.490***	65.642***	68.699***
	(1.434)	(1.924)	(3.000)	(1.194)
Observations	150,382	150,333	150,338	150,379
Random variance party	17.18	47.86	54.80	23.28
Random variance country	7.34	6.80	40.36	0.84
Residual variance	37.54	129.90	107.12	86.98
ICC party	0.28	0.26	0.26	0.22
ICC country	0.12	0.04	0.20	0.02
Log Likelihood	−486,326.100	−579,427.300	−564,981.000	−549,431.700
Akaike Inf. Crit.	972,692.300	1,158,895.000	1,130,002.000	1,098,903.000
Bayesian Inf. Crit.	972,890.700	1,159,093.000	1,130,200.000	1,099,102.000

Note: *p<0.1; **p<0.05; ***p<0.01

where moving from one age category to another corresponds to a -.02 decrease in congruence. In other words, younger people are more congruent with their most preferred party on EU topics.

Turning to gender, another individual characteristic, the results in Table 18 suggest that males are more congruent with their most preferred party on the *Overall.ipc*, *Social.ipc* and *EU.ipc*, but not on the *Economy.ipc* one. The size of the effects is rather similar, except for the *Social.ipc* model, where the coefficient 0.08 does not reach statistical significance.

Moving from the models with country and party level variables to the extended models, the effect of party and country level predictors changed only slightly,. The only less stable model is the *EU.ipc* one, where the EFNP, disproportionality of the electoral system, niche and governmental status variables changed direction of their effect, but do not reach the conventional threshold of statistical significance.

As individual level predictors are introduced in the models, residual variance at the country level increases, although the increase is rather small. Comparing the models from Table 18 with the baseline models from Table 40 on page 257 of the Appendices, the party level ICCs remain constant, but there is a decrease in the ICCs at a country level. In other words, as I account for individual level predictors, observations from the same countries are no more similar than observations from different countries. However, there is more variation accounted for by the clustering at a party level.

6.4 Discussion

After portraying a rather worrying image of congruence between voters and parties in Belgium, Walgrave, Lefevere, Pepermans & Nuytemans (2009) argue that one of the reasons for high incongruence is the fact that the representational process is flawed. More precisely, they suggest that voters vote for parties for the wrong reasons. If that is indeed the case, and voters did not take policies into consideration when picking a party, then how are parties supposed to keep their electoral promises? Leaving from the assumption that the mismatch between parties and voters leads to incorrect voting is caused by voters voting for par-

ties for the wrong reasons, Walgrave, Lefevere, Pepermans & Nuytemans (2009) advance the proposition that 'parties do not keep their promises to their voters not because they are unloyal or because they betray their promises once they are in power but simply because they promised other things than their voters think they have'. Unfortunately, this leads to increased distrust in political parties and to political alienation. The causes of alienation from politics is far from the scope of this research. However, it places the focus on the individual, as a responsible decision maker in the electoral arena, more precisely in the voting process.

The previous two empirical chapters of the thesis focused on country and party level characteristics of congruence, respectively. Following the pattern set by the most studies on political representation, I first tried to explain the congruence puzzle at a country level. The first attempt, focusing on country level characteristics did not prove very fruitful. The variation in congruence levels across countries explained by the models developed in the first empirical chapter was rather modest. In the second chapter, party level variables were added to the models, but again, the explained country level variation was rather small, and in some cases it even decreased. Following Walgrave & Lefevere (2013), in this chapter I focused on individual level characteristics. Walgrave & Lefevere's (2013) argue that congruence is better explained at an individual level, where the match between voters and parties takes place. The analysis run in this section allows me to support this view.

The individual level characteristics that make the focus of this chapter are age, gender, education, political interest and self-placement on the Left-Right scale.[81] Table **??** on page **??** presents the results of hypotheses tests for the analyses run in this chapter.

Educational attainment has the hypothesized effects across models.[82] We encounter a similar situation when looking at the effect of political interest. In most of the models[83] more interest in politics corresponds to more congruence. The positive association between political interest and congruence is in line with

[81]Due to data limitation, the ideological self-placement on the Left-Right scale variable is included only in the models based on the 2009 EU Profiler data

[82]Except in the *Economy.ipc* 2014, but the negative coefficient does not reach the conventional threshold of statistical significance

[83]Exception make the *Economy.ipc* and *Social.ipc* 2014

the results of previous studies, which showed that more interested voters are more likely to be knowledgeable about politics and in consequence, to vote for a party that shares similar political views (Steenbergen et al. 2007, Lau et al. 2014). These results confirm previous findings in the representation studies, where individuals who are highly educated and more interested in politics tend to be more congruent with their most preferred party (Walgrave & Lefevere 2013).

Age, gender and self-placement on the extremes of the Left-Right scale[84] are included as control variables. The effect of age on congruence is not consistent across the two time points. In the analysis based on the 2009 EU Profiler data, younger individuals tend to be more congruent with their most preferred parties, but the opposite effect is found in the 2014 EUvox analysis. Women are more congruent with their most preferred party on the *Social* issue area, but the effect is found only in the 2009 EU Profiler analysis. This effect may be due to the nature of the topics under the *Social* issue area, such as issues related to abortion and education.

For the analysis based on the 2009 EU Profiler data, the effect of country level predictors stays fairly constant once the individual level predictors are added to the models. The effect of party level predictors is less stable, especially for governmental status and Left-Right leaning variables. The *Economy.cp* model is the less stable one. Turning to 2014 EUvox data, the extended models are more stable. The only model in which niche and governmental status variables change direction is the *EU* one. After discussing the main findings of this chapter, in the next and final section of this chapter I will discuss the results in the light of their implications for congruence studies.

6.5 Conclusions

As Curini et al. (2015) begin their study, policy proximity is not a novel research topic. However, its importance for the well functioning of democracies fuels developments in the field. The classical study of Miller & Stokes (1963) examined to which degree the opinions of citizens and individual legislators overlap, on issues related to welfare. A decade later, Barnes (1977) shifted the focus from legislators to political parties in government, an approach further developed in

[84]this measure was available only in the analysis is based on the 2009 EU Profiler

many studies focusing on the degree of overlap between the citizens' political preferences and the ones of the elites, such as Dalton (1985) and Macdonald et al. (1995) to name just a few. Most studies assess the overlap on the ideological Left-Right, although as Curini et al. (2015) emphasize, in an ideal scenario one would have citizens and parties express their political preferences on the same set of issues. Lacking such data, scholars of political representation have resorted to the use of the Left-Right scale. As highlighted throughout the thesis, VAA generated data offers the perfect opportunity to study the policy preference overlap between citizens and political parties, because both can express their issue preferences on a rather large number of policies. In a similar manner to Dalton (1985), who assessed issue congruence on policy areas, I split the policy issues included in the VAA tool in three policy dimensions, or issue categories, namely the *Economy*, *Social* and *EU*.

The analysis at country and party level did not explain much of the variation in issue congruence across countries. Following Walgrave & Lefevere's (2013) recommendation, I turned my attention towards individual level characteristics. After all, it is the individual who casts her vote for one of the political parties who compete in elections. The remainder of this section is built around three major points, focusing on the role individual characteristics play in explaining the match between voters and parties, the advantages offered by taking into account issue dimensionality of policies and finally, the effect of being a niche party supporter.

The first point refers to the importance of individual level predictors in explaining the issue congruence puzzle. While most studies systematically ignore individual level characteristics when explaining congruence, Walgrave & Lefevere (2013) argued that the focus should be on the individual, as she is the one that takes the voting decision. The individual level predictors, age, gender, self-placement on the Left-Right scale, educational attainment and political interest explain some of the variation at the country level. However, more variation is explained at the party level in the baseline, but also in the extended models. The results of the analyses run in this chapter emphasized the role individual level characteristics play in the representation process. As Walgrave & Lefevere (2013) point out, tackling the congruence puzzle at a voter level allows scholars to address questions

that have not been dealt with before.

The second point focuses on issue areas. The analyses in the previous two chapters have shown that there is variation in congruence scores across issue areas, but most importantly, that the effect of country and party level predictors is not consistent across the *Economy*, *Social* and *EU* issue dimensions. Turning to the role of individual level characteristics, the effects they carry across models are more consistent. However, the *EU* issue area in the 2009 EU Profiler analysis and *Economy* issue area in the 2014 EUvox analysis deviate from the patterns set by the *Overall* models. These results support the argument for a multidimensional approach of assessing congruence.

The third and final point addresses the effects of being a niche party supporter. In an extensive study of niche parties, Belchior (2013) argued that niche parties present less congruence, because due to their radical positions (in most cases), they will be placed towards the extremes of the ideological scale, while their supporters are situated at less extreme positions. However, Belchior's (2013) findings are the result of an approach based on ideological congruence. Because the focus of this study is on issue congruence, the match between voters and their most preferred party is assessed on policies. What the results of the analysis developed in this chapter shows is that niche party supporters are in closer agreement with their most preferred parties, compared to mainstream party supporters. This finding applies to the *Economy* and *Social* issue dimensions[85], but not to the *EU* one. In other words, niche party supporters are in less agreement with their most preferred party on EU related topics. This helps to support the point made above, that the dimensionality of the issue matters greatly.

[85] Also to the Overall assessment of congruence, that averages across congruence scores on issue areas

7 Conclusions

The aim of this thesis has been to inspect the relationship between institutional designs, such as the features of the electoral system, party and individual level characteristics and congruence in European Union countries. Congruence is referred to as the match between prospective voters in the elections to the European Parliament of 2009 and 2014 and their most preferred party, expressed as vote intention, on a set of 28, respectively 22 policy issues. The data were collected with the help of two pan-European Voting Advice Applications, the 2009 EU Profiler and 2014 EUvox, in the month previous to the elections. This chapter concludes the thesis and it is structured around the motivations behind this work, the contributions it makes to the field of political representation, including limitations and ideas for further research.

7.1 Revisiting the motivations behind this thesis

The motivation behind this thesis is multi-faceted. The main motivation is rooted in the disagreement found in the representation studies over the effects of institutional predictors. A long line of studies have shown that in plurality systems the representation of the majority is enhanced, but certain groups are neglected (Dalton 1985, 2017*b*). In proportional representation systems, these groups gain representation. As a result, PR systems present an representational advantage over majoritarian systems (Huber & Powell 1994, Klingemann et al. 2006, Powell 2000, Ezrow 2010). But research in the last decade brought evidence against the representational advantage of PR systems upon majoritarian ones (Blais & Bodet 2006). Given the limited number of majoritarian systems in the EU, I used alternative measures, such as the disproportionality of the system. However, the results of the analysis proved inconclusive on this aspect.

Another strong motivation behind this thesis is the lack of constant findings in studies of representation. Belchior (2013) argued that system level characteristics, such as the proportionality and fractionalization of an electoral system do not determine the level of congruence between voters and their representatives, as suggested in a line of studies on representation. She brings evidence that supports the importance of investigating the effect of the characteristics of polit-

ical parties, focusing on their electoral strategies. Furthermore, issue congruence studies that take a comparative approach are scarce, due to a lack of data.

Going down the ladder of the levels of analysis, political representation literature systematically overlooks the effect individual characteristics could have on congruence. With two notable exceptions, Walgrave & Lefevere (2013), and Steenbergen et al. (2007), the scholarly literature on representation only focused on the effect of system and party level predictors in relationship with congruence. As Walgrave & Lefevere (2013) show, individual level characteristics influence the degree of the match between the voter and her most preferred party. Furthermore, their study emphasizes the possibility to also consider interactions between individual level and party level characteristics.

Last but not least, the main aspect that lays at the foundation of this research is the debate over the best approach to measuring congruence. This last point covers two aspects, the first one focusing on ideological versus issue congruence, and the second related to the different ways of measuring congruence, as an *absolute* or a *relative* measure (Golder & Stramski 2007).

Most research in representation studies employs ideological, rather than issue congruence. Golder & Stramski (2007) issue an important critique of common practice in representation studies, suggesting that research fails to address the way in which ideological congruence is most appropriately conceptualized given the research goals. They argue that oftentimes, the conceptualization is driven by data availability and convention.

Ideological matching on the Left-Right scale is the most used measure of assessing congruence. Powell (2000) argues that the decision to use the Left-Right scale is often based on the assumption that in most modern democracies, the Left and Right represent a unidimensional discourse that is familiar to voters. The use of the Left-Right continuum requires that the political issues are reduced to a single dimension. However, there are new issues that do not fit alongside the traditional Left-Right divide. Additionally, the ambiguity of the meanings of Left and Right across different electoral contexts poses problems when used in a comparative study. The issue of measurement focuses on the problem with the *median citizen* approach, as a less reliable portrayal of reality, in which the

distribution of preferences is ignored.

7.2 Summarizing thesis contributions

7.2.1 Comparative approach

Drawing on the motivations behind this thesis, I will revisit the contributions to the literature made by this research, together with their implications. The first contribution of this thesis stems from its comparative nature. While most studies on congruence focus on one or two cases (Belchior 2013), this work takes a comparative approach, focusing on EU member states. In the long line of congruence studies, comparative work such as Dalton, Farrell & McAllister (2011), Dalton (2017*a*), Huber & Powell (1994), Rohrschneider & Whitefield (2012), Wessels (1999), Thomassen & Schmitt (1999) looked at ideological congruence and to a lesser extent at issue congruence (Dalton 1985, 2017*b*). Data on party positioning are now plentiful. However, there are not many sources of data where the voter and party positioning are interconnected. The data generated through the two VAA tools developed for the EP elections of 2009 and 2014 offer a good opportunity to study congruence in a comparative perspective, as it captures the political preferences of parties and citizens on the same set of issues and on the same scales.

The elections to the European Parliament provide a suitable context for studying the match between prospective voters and their most preferred parties. Although named *second order elections*, due to their limited importance for national politics, EP elections are a time when people from multiple nations think simultaneously about their political preferences and the parties that can best represent their interests. As Dalton (2017*b*) emphasizes, the party choices in EP elections are based mainly on national conditions for a specific national party, and less on the large European party families and their stances on EU issues. As a consequence, the second order nature of the elections under which the data were collected do not diminish the findings of this research.

The analysis in this thesis created two snapshots of issue congruence in EU member states, assessed in 2009 and 2014. The analysis based on the data generated through the 2009 EU Profiler focuses mostly Western European democracies,

including only Poland as a Central and Eastern European country; however, the 2014 EUvox analysis includes more Central and Eastern European countries, such as Hungary, Romania or Bulgaria. The small number of Central and Eastern European countries in the 2009 data set is due to data limitations. Even in 2014 EUvox data, the sample sizes from Central and Eastern European countries are systematically smaller than those of Western European countries. Some of the comparative work on issue congruence limited the number of countries to EU15 nations (Dalton 2017*a*) or similarly, focus on advanced democracies (Blais & Bodet 2006, Golder & Stramski 2010, Golder & Lloyd 2014, Ferland 2016). Instead of reducing the universe of cases to a smaller number, similar across the two data points, I chose to maximize the number of countries, as research on this countries is scarcer. Although the difference in sample sizes between Western and Central and Eastern European countries leads to demographic biases to be exacerbated, the differences are accounted for within the hierarchical regression framework.[86]

The results indicate that overall, prospective voters in the EP elections of 2009 and 2014 have identified the parties that match their political preferences rather well. For the 2009 EP elections, the average congruence score across countries is 72.9 for *absolute citizen congruence* and 83.0 for *relative congruence*. However, there is variation across countries, but the ordering of countries according to their *overall* congruence scores is not consistent across the two measures of congruence. While Spain presents the highest levels of representation and Germany the lowest, when congruence is assessed as an *absolute citizen* measure, its top positions are replaced by Sweden and Portugal, when congruence is assessed as a *relative* measure. In 2014, the average scores decreased by 10 points. Looking at *absolute citizen congruence*, the top and bottom positions are occupied by the Czech Republic and Spain, and by Estonia and Germany when turning to *relative congruence*. There is no clear pattern in congruence scores that would

[86]Table 41 in Appendices, page 258, presents the results of extended hierarchical models testing the predictors of *absolute citizen* congruence on a subset of countries that were included in both analyses, for 2009 and 2014. Compared to the extended models from chapter six, the results are rather similar. As a consequence, one can argue that the countries included in the 2014 EUvox dataset (mostly CEE countries) do not influence the results due to the demographic bias they may carry

help differentiate between the new and the old democracies of Western Europe. The low number of Central and Eastern European countries in the 2009 data set makes the results indicating that old democracies present more congruence less reliable. In the analysis of 2014 EP elections, the finding is reversed, results suggesting that old democracies present less congruence.

7.2.2 Issue congruence versus ideological congruence

The vast literature on congruence follows the divide between ideological and issue congruence. Thomassen (2012) raised for the first time the problem of the *blind corner of representation*, arguing that the new cultural and social issues are not properly represented by the Left-Right dimension. In a similar fashion, Dalton (2017*b*) argues that over the last decades, the structure of political competition became more complex. As a consequence, the Left-Right divide cannot reflect accurately the wide range of party stances on a larger set of issues. Furthermore, the ambiguity of the Left-Right scales raises the problem of comparability, with Left and Right representing different issues in different electoral contexts. The issue congruence approach, although more rare due to data scarcity, avoids this ambiguity problem.

One can think of the *Overall* measure of congruence as an equivalent of a uni-dimensional measure, such as the Left-Right scale. Although the assessment of congruence as an *Overall* measure does make the variation across countries visible, it blurs the effect of the predictors. In fact, the effect predictors have on congruence vary across issue dimensions, but these differences are engulfed in the *Overall* approach. This phenomenon is more pronounced in the analysis conducted at the party and individual level, where on certain issue dimensions the predictors have different effects compared to the ones of the *Overall* model. For example, the effect of individual level predictors on the *Economy* issue area do not follow the pattern set by the *Overall* model.

These differences reinforce the point made by Golder & Stramski (2007), on the researchers' failure to justify the conceptualization used. They blame this shortcoming on the extensive use of conventions and data availability. One of the motivations behind this thesis; the disagreement in the congruence literature over the best measuring approach, influenced my choice of issue over ideological

congruence. The proponents of ideological congruence assume that a wide range of issues can be accommodated by the ideological continuum. However, the societal changes over the last decades brought new issues onto the political agenda, issues that do not easily fit on the Left-Right divide. Not being able to assume unidimensionality brings me to the third contribution of this thesis, focused on issue dimensionality.

7.2.3 Issue dimensions

The issue congruence approach assesses the match between voters and parties on a set of issues. More precisely, it is the distance between the positions of the representatives (parties) and the represented (prospective voters). Rather than measuring congruence issue by issue (Lax & Phillips 2012), the policy issues were compiled into issue dimensions. As Dalton (1985, 2017*b*) repeatedly shows, the voter-party congruence varies not only across parties, but also across issue areas.[87] One gains a better understanding of congruence by looking at issue areas, compared to when an overall assessment of congruence is used. As Dalton (1985) shown, the distance between citizens and parties varies across issue domains.

The *overall* assessment of congruence offers a less nuanced view than the *Economy, Social* and *EU* models. Focusing on issue areas, descriptive analysis shows that prospective voters are closer to their parties on issues that belong to the *EU* issue area, compared to the *Economy* or *Social* ones. While the link between parties and voters is mediated by partisan identification, the issues on which parties differentiate themselves play an important role, as the variation in congruence scores across issue areas has shown. Although it is useful and also necessary to know on which issue dimensions parties are closer to their supporters, it is also important to know whether institutional factors, party or individual characteristics influence these distances.

Moving from descriptive to regression analysis, the results suggest that the effect of party and individual level predictors vary, according to issue areas. For example, while older people seem to be more congruent with their most preferred

[87] Dalton (1985, 2017*b*) used both a 'issue centrism' which is a distance measure of congruence, as well as a measure of political 'responsivness', assessed as the result of a regression equation between the party

party on issues pertaining to the *Economy* or *Social* issue areas, the opposite is true for the *EU* dimension. Here, an increase in age was associated with less congruence.

Another interesting result is the effect of gender, that varies across issue areas. Women are more congruent with their most preferred parties on the *Social issue* area. The reason for this discrepancy may by attributed to the nature of issues that make up this issue area, given that the policies address issues such as same sex marriage, criminality or abortion. This is where an approach using salience may be extremely fruitful, because it is possible that women put more emphasis on social issues, compared to economic ones. I will return to the idea of incorporating salience in the limitations and further research section.

To sum up, the effects of predictors vary across models, but less so on the analysis centered on country level characteristics. In the analysis based on 2009 EU Profiler data, the *EU* issue area deviates from the patterns set by the *Overall* model. Similarly, in the analysis of 2014 EUvox data, the *Economy* model offered different results. These results confirm Dalton's (1985) choice and recommendation for a multidimensional approach to congruence.

7.2.4 A *relative* measure of congruence in addition to a *absolute citizen* one

Last but not least, the forth contribution brought by this research is represented by the use of a *relative* measure of congruence, in addition to an *absolute* one, which is the standard approach. The area of representation studies is burgeoning due increased data availability. But with this increase comes a great deal of ambiguity, based mostly on methodological considerations. Most studies use congruence assessed as an *absolute* measure. More precisely, what this means is that the position of the average (or median) party voter[88] is compared to the position of the party (Dalton 2017*b*, Huber & Powell 1994, Thomassen & Schmitt 1999). Golder & Stramski (2010) argued that *absolute congruence* can be assessed only when the Left-Right dimension is perceived similarly across all contexts[89]. They put forward a *relative* measure, which avoids the use on an

[88] Or party supporter

[89] In other words across all countries

abstract scale, such as the Left-Right one and provides a metric free measure of congruence.

In this thesis, I have employed both an *absolute* and a *relative* measure, which represents the fourth contribution of this work. Both approaches were conceptualized as a *many-to-one* type of relationship, following Golder & Stramski (2010). To refresh, he *absolute congruence* looked at the average absolute distance between all the party supporters and the party, taking into account the positions of all party supporters, not only the position of the median citizen. The *relative* measure of congruence followed a similar calculation, but instead of an average absolute distance, it took into account the distribution of citizens' preferences.[90] The strength of the *relative* measure lays in the fact that it measures the average distance of a prospective voter from the most preferred position of the supporters of one particular political party, relative to the average distance between the voter and the party. Golder & Stramski (2010) argue that this measure is superior to alternative conceptualizations because it incorporates information about the distribution of citizens' preferences, instead of looking just at the distance between a representative and the median citizen.

According to the debate on measurement initiated by Golder & Stramski (2010), the two approaches to measure congruence are bound to provide different results. As expected, the two approaches provided two slightly different images of congruence across the EU member states. The two approaches to assessing congruence revealed variation not only across countries, but also across issue categories. While countries are rather similar on the *EU* issue area, more variation across countries was found on the *Social* dimension. Overall, the *relative* measure of congruence offered a more optimistic portrayal of representation across countries, compared to the *absolute congruence* measure. What I mean by 'optimistic portrayal' is that the *relative* scores were on average 10 points higher, especially for smaller parties. This may have to do with the fact that by taking into account the distribution of preferences of party supporters, small parties are advantaged.

[90] More precisely the distribution of preferences of all supporters of a party

7.2.5 Niche party status and niche party supporters

Ezrow (2010) argued that electoral systems matter for political representation in a different way than decades of research suggest. He stressed the importance of niche parties as agents promoting congruence and wrapped his argument around the idea that electoral systems matter because they allow or prohibit niche parties. Proportional representation systems allow for niche parties to become institutionalized and ultimately, to offer political alternatives that may lead to better representation. Confirming Ezrow's (2010) argument, I have found that as the disproportionality of an electoral system increases, niche parties are less congruent with their supporters.

Furthermore, the analysis run in this thesis has shown that niche parties are associated with more congruence, compared to mainstream parties. In 2009, niche parties on the Left are more congruent with their voters, compared to those on the Right. In 2014 however, niche parties on the Right present higher levels of congruence than those on the Left. This inconsistency can be attributed to the fact that the 2014 dataset includes radical right parties that present high levels of congruence with their supporters.

Furthermore, the analysis at the individual level showed that those who support a niche party present higher levels of congruence. One possible explanation for this is that the distribution of preferences across party supporters is narrower for a niche party, compared to a mainstream one. However, the analysis on the 2014 EP elections showed that niche party supporters are less congruent on the *EU* issue area. One potential explanation is that citizens place less emphasis on these issues, and are less likely to know the party's stance on EU topics, therefore lacking congruence.

7.2.6 Focus on individual level

Walgrave & Lefevere (2013) pointed out that the vast scholarly literature on political representation provides explanations for congruence at the country or party level of analysis, consistently disregarding individual level characteristics. Taking their argument a step further, they place the voter at the centre of the representation process, saying that ultimately, it is the voter who takes the vote

decision and casts a vote for her preferred political party. Accordingly, individual level characteristics should be also considered in explaining the agreement (or the lack of it, in Walgrave & Lefevere's (2013) study) between voters and parties. Tackling the congruence puzzle did prove a fruitful strategy, as age, gender, ideological self-placement on the Left-Right scale, education and political interest helped explaining some of the variation at the country level.

7.3 Limitations and future research

While it is a goldmine of data on political behaviour and political preferences, VAA generated data has its caveats. The main disadvantage of VAA data stems from the fact that makes it unique, namely its online nature. When looked at as tools generating data, VAAs are online voluntary samples. The list of biases inherent in VAA data starts with Internet access and ends with political interest. The profile of a VAA respondent portrays a young men, those who are very interested in politics, with high education or from urban areas. Therefore, analysis based on VAA generated data will be biased towards these demographic sub-groups.

Using data from the first two pan-European VAAs was a challenge in the sense that most VAA research is conducted on countries with high VAA usage, with millions of users. Using VAA data from EU countries means that the differences across countries are to some extent reflected in the data. More precisely, the biases inherent in VAA data are exacerbated in Central and Eastern Europe, where VAA tools are rather novel. As a consequence of their novelty, in Central and Eastern European countries VAA usage is lower compared to Western European democracies, which translates into low sample sizes. Accordingly, there is less variation in age, education and political interest. For example, due to data limitations, in the 2009 EU Profiler dataset I included only one Central and Eastern European country (Poland). The increased popularity of VAAs mirrored in the country sample sizes of 2014 EUvox, as 9 Central and Eastern European country were included.

Due to the lack of representativeness of VAA generated data, the results must be treated with caution. The findings do not talk about the entire population of EU countries, and are limited to VAA users in these countries. One possi-

ble way of dealing with the problem of representativeness of online samples is through post-stratification techniques (Wang et al. 2014). However, applying post-stratiifcation techniques to VAA data is an exercise that proved futile, due to the low samples sizes in CEE countries that led to insufficient data in certain demographic cells. Up to this point, scholars in the VAA community have not found a satisfactory way to poststratify VAA data.

In advanced democracies however, VAA tools are an integrated part of the electoral process, with millions of users consulting them in election times (Garzia & Marschall 2012). As the popularity of the VAAs increases and more and more people use them, the problem of representativity will become less stringent. Furthermore, in his recent study on congruence in the 2009 elections to the European Parliament Dalton (2017*a*) recognized the potential VAA data holds for studying congruence, because it has citizens and parties express their policy preferences over the same set of issues.

I believe the analysis developed in this thesis pinpoints to the advantages presented by VAA data, having the political preferences of voters and parties expressed on the same scale, on a rather large set of issues, and maybe even more importantly, in the same time frame. As VAAs become an integrated part of the electoral process, congruence studies could benefit greatly from this expansion. At the same time, the ideas developed in this thesis have potential for post doctoral work. For starters, I could work on improving the measure of congruence by including issue saliency. Not only that individuals have different policy preferences, but the order of the preferences differs as well. As a consequence, one could give priority to an issue on which the agreement with her favourite party is low. By including salience in the congruence measure, her overall congruence score would be lower,and therefore inconsistent with a congruence score without salience. As Giger & Lefkofridi (2014) has shown, when compared with the results of other studies, their measure of salience-based congruence depicted a different story of representation. The 2009 EU Profiler data contains salience measures for each one of the 30 policy statements, but this measure was not included in the tool for the 2014 EP elections. In order to make the measures of congruence similar across the two elections, I chose to leave aside the salience measure.

This work was built under a frequentist approach. Accordingly, the results were interpreted while accounting for p-Values, as correspondents of statistical significance. In the light of the recent crisis in social sciences regarding p-Values (Wasserstein & Lazar 2016), one of the directions this work could be steered towards is a Bayesian approach. Furthermore, given the nature of VAA data as a non-random sample, but also the hierarchical nature of the analysis, Bayesian modeling represents a rather promising alternative.

Finally, I think that scholars of political representation, and more precisely of congruence should acknowledge the immense potential held by VAA data. At the same time, VAA developers should put more emphasis on collaboration. What I mean is that while accounting the differences across countries, VAA developers could create a set of policy issues that could become a staple of each VAA, that would allow for cross country comparisons to be made. More importantly, VAA data could become a strong competitor for other large surveys on political behaviour.

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8 Appendices

8.1 Appendices Chapter 1

VAAs: Role and differences across electoral contexts Although the effect of VAAs on users' behavior is a promising research sub-field, there is another

question related to the use of VAAs that has not been addressed yet: what makes VAAs to thrive in certain countries? Is it just the long experience with these tools (as in the Netherlands or Switzerland)? Is it the number of political parties? Or more subtle aspects, such as features of the electoral system (ballot structure, polarization, party-system fragmentation)? Are VAAs endogenous in relationship to the electoral systems? Although a pattern can be observed in regard to the popularity of VAAs across certain electoral systems, there is no clear relationship established. To shed light on this matter, a more careful and detailed analysis is required.

First of all, one needs to look carefully at the countries with long-term VAA experience, to see what these countries have in common. At a first glance, the situation points towards PR systems and a large number of political parties, which are characteristics of the electoral system. If these characteristics determine the adoption and extended use of VAAs, they are endogenous to the electoral system. If that is the case, it may have implications for the study of political institutions and party systems. Also, the design of the tool may affect greatly the tool, while media coverage influences its popularity. All these factors will be considered below.

Features of the electoral system

Besides Internet access, following Dalton et al. (2000), Ladner, Felder & Fivaz (2010) argue that another factor which can contribute to the popularity of VAAs is a decline in the relationship between voters and parties, such as the increased volatility and number of swing voters. They suggest that the electoral system, combined with the low turnout rate in elections contributes to the success and large use of VAAs in Switzerland. The fragmented social context adds to this country-specific context.

Although the VAAs have expanded across all European countries and beyond, they have been more successful in countries with PR systems and a large number of parties (i.e. Switzerland, Netherlands, Belgium and Finland) (Ladner, Felder & Fivaz 2010, Ruusuvirta 2010). The presence of a large number of parties implies a richer political offer, that makes it more difficult for voters to discern between the parties' positions. Furthermore, different features of electoral

systems such as open-lists (Ruusuvirta 2010) make the decision-making process even more complicated for users. Therefore, they would seek help in the form of VAAs.

Tackling the relationship between VAAs and electoral systems is a difficult task. There is no doubt that VAAs are in continuous expansion and are turning into a popular campaigning tool. While some countries, such as The Netherlands, Germany and Switzerland, present a long VAA tradition, with million of users using these sites in election times (Garzia & Marschall 2012), other countries have rather moderate numbers of visitors. What else can help to explain the difference across countries in the level of VAA usage? What do The Netherlands, Germany, Switzerland and Belgium have in common? In what aspect do they differ from the rest of EU countries?

Internet usage

Following the Dutch example of Stemvijer, Glasovoditel vas introduced in Bulgaria in 2005, Politarena was introduced in Switzerland in 2003 and Wahl-O-Mat in 2002 in Germany. Wahl-O-Mat became very popular in Germany, following the trend of the Dutch StemVeijer, the Swiss Politarena was out-taken by the Swiss *smartvote*, but still had a generous number of users, while the Bulgarian Glasovoditel had only 30.000 users for the EU elections of 2009. What can explain the variation in the number of VAA users across the European countries?

At a first glance, maybe the most intuitive reason is the use of the Internet, as depicted by Internet literacy and Internet penetration rates. In an analysis of the Swiss VAAs, Ladner, Felder & Fivaz (2010) argue that the increasing use of VAAs can be explained through increased Internet access and technological advancement. While almost two thirds of EU households have Internet access at home, a closer look reveals significant differences across countries. While Nordic and Western countries such as the Netherlands (93%), Sweden (91%) and Denmark (88%) have very high penetration rates, Eastern and Southern European countries present much lower levels, such as Italy (44%), Portugal (47%) or Romania (54%). Up until this point, the countries with high VAA usage also have high penetration rates. One can notice that the countries with large VAA usage also present high Internet literacy and high Internet penetration

rates. One possible way in which these factors impact the quality of the VAA data is through he exacerbation of the biases mentioned above. Given the large VAA usage in countries such as the Netherlands, where more than half of the electorate consults these tools, the users will be more heterogeneous, in terms of education, age, interest in politics and party affiliation. It follows naturally that the quality of the data from these countries is superior, compared to data from Eastern European countries, where VAAs are still a novelty.

As stressed above, the biases in the data from countries with low VAA usage will be exacerbated. As a consequence, the findings from these particular countries must be read with a wary eye. In trying to deepen our understanding of the biases inherent in VAA data, looking past the demographic ones, I will focus on other potential sources of bias, such as the role of mass media and social capital.

The role of mass media: media coverage and media partners

Although they are campaigning tools that provide users with political information, in a way competing with other media channels, VAAs also have a dependency relationship with media channels. Because of its online character, VAAs limit their coverage to online medium, meaning a limited pool of potential users. However, advertisement in newspapers, radio or television can boost VAA's popularity, sending more users online. Regardless of the level of sophistication of the tool, media coverage plays a very important role in fostering the use and success of the VAA. As (Ladner, Felder & Fivaz 2010, p. 99) illustrate, the *smartvote* benefited from the support of the relevant Swiss media, radio, television and print, that helped to expand the VAA coverage beyond the Internet community.

As the Swiss example shows, the media support is a very important factor in the dissemination and success of a VAA. Playing this card, media companies started to produces their own VAA tool, which are then intensively promoted in their media channels. A very good example is the UK, where there were more than 10 VAA tools in the campaign for the 2015 General Elections. The UK is not a singular case; Finland is another perfect example of media companies promoting their own tools in election times (Ruusuvirta, 2010, p54).

Social capital

After reviewing some of the practical elements that could affect the success of a

VAA, I will now turn to one that is more difficult to grasp. The way in which people see these tools can affect their use. Whether people trust online tools can influence their use. Whether people take political advice without the fear that it is biased can also be a predictor of VAA use. The dissemination of the tool is carried out not only through media, but also through peers. If the conditions of trust, communication and networking play a role in the use of VAAs, social capital can be an important predictor of their use in a country.

If using a VAA is considered an act of political participation, then developed democracies, which experience newer forms of political participation, in the form of buycotting and signing petitions, would present higher levels of VAA usage. Nowadays, democracies experience decreasing levels of party membership and increased volatility (Dalton et al. 2000). This does not necessarily mean that people are exiting the democratic process, it means that they find new ways of participating. The effects of social capital are numerous, but one of the most important is the stimulation of political participation. Through networks, when the network members trust each other, they are more likely to become more active (Putnam 2001).

8.2 Appendices Chapter 4

As a first test of hypothesis testing, preliminary analysis shows that the effective number of parties, polarization, district magnitude and old democracy are positively correlated with the measure of *absolute citizen congruence* assessed with the help of 2009 EU Profiler.[91] [92] District magnitude has a positive and statistically significant correlation coefficient, which indicates that as congruence increases, so does the disproportionality, which goes against the theoretical expectations. Polarization is weakly linked with the effective number of parties (see Table 19 and Table 21), as hypothesized by Dalton (2008). Similarly, Kim et al. (2010) argue that these two features of the party system vary independently of each other. According to Belchior (2013) the more proportional systems do not contribute to higher congruence, on the contrary, they seem to promote more incongruence. In a similar fashion, the relation is positive, but disproportionality does not correlate strongly with congruence.

Table 19: Correlation Matrix - Absolute citizen congruence EUP

	1	2	3	4	5	6
1. Congruence	-					
2. EFNP	0.04***	-				
3. LSq	0.02*	-0.63***	-			
4. District magnitude	0.05***	0.19***	-0.37***	-		
5. Polarization	0.07***	0.08***	-0.30***	0.20***	-	
6. Old democracy	0.02*	0.20***	-0.09***	-0.08***	0.27***	-
Note:						*p<0.1; **p<0.05; ***p<0.01

Source: 2009 EU Profiler; N = 11406; *Absolute citizen congruence* is assessed at individual level

To test for expected variation in the congruence scores per issue area, I use the 'Asymptotic test for the equality of coefficients of variation from k populations' (Feltz & Miller 1996) and the 'Modified signed-likelihood ratio test (SLRT) for equality of CVs' (Krishnamoorthy & Lee 2014), within the *cvequality* R package.

Table 21 shows the Pearson R correlation coefficients of congruence and the country level predictors assessed in 2009. The correlation coefficients indicate the

[91] The Pearson r correlation coefficients are obtained with the use of Hmisc package in R

[92] Even though the correlation between a continuous and a dichotomous variable, congruence and old democracy, should be approached with a point-biserial correlation, I am reporting the Pearson R correlation coefficients. Point-biserial correlation is a special case of the Pearson's product-moment correlation. The difference in the results is on the second decimal point only

Table 20: Summary of variation tests

Test name	Test statistic	p-value
Asymptotic	4110.01	0
M-SLRT	3974.46	0
Note:		*p<0.1; **p<0.05; ***p<0.01

Tested on issue congruence per issue area - Absolute citizen congruence

Source: 2009 EU Profiler

same relationships as in the Table 19, with *absolute congruence*, with the exception of disproportionality of the system. Disproportionality has the hypothesized effects, but fails to reach statistical significance. The lack of statistical significance can be attributed to the different number of cases in the two correlation analyses. Because *absolute congruence* is assessed at an individual level, while *relative congruence* is at party level. As sample size increases, the correlation coefficient varies less (Altman & Krzywinski 2015).

Table 21: Correlation Matrix - Relative congruence EUP

	1	2	3	4	5	6
1. Congruence	-					
2. EFNP	0.13	-				
3. LSq	-0.11	-0.61***	-			
4. District magnitude	0.01	0.26*	-0.48***	-		
5. Polarization	0.16	0.11	-0.27**	0.12	-	
6. Old democracy	0.12	0.16	-0.01	-0.12	0.30**	-
Note:				*p<0.1; **p<0.05; ***p<0.01		

Source: 2009 EU Profiler

Larger district magnitude means more proportionality, as the correlation with the disproportionality index, LSq, indicates in both correlation analyses, with r = -037*** and r = -0.48*** (see Table 19 and Table 21). The lively debate about district magnitude points out that even if larger district magnitudes are associated with increased proportionality, as more parties get representation into the legislature, the linkage between an elected member and their voters becomes weaker. This is due to the fact that the larger the district magnitude, the larger the geographic area it covers, therefore less chances that the voters know the representative well.

As in the previous analysis, the tests for the variation in congruence scores across

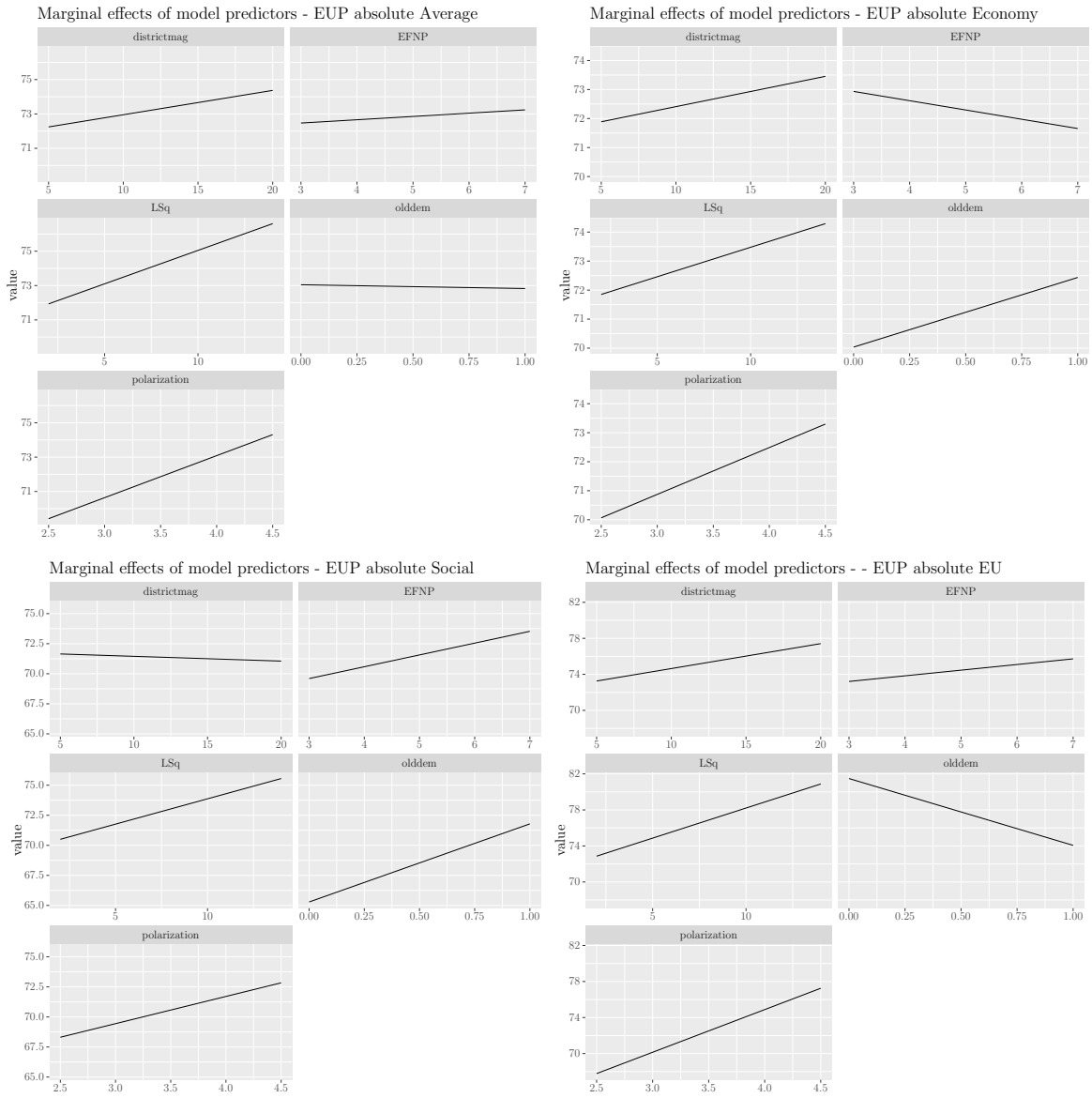

Figure 41: Marginal Effects - EU Profiler Absolute citizen congruence

Table 22: Summary of variation tests

Test name	Test statistic	p-value
Asymptotic	9.60	0.008
M-SLRT	9.25	0.009
Note:		*p<0.1; **p<0.05; ***p<0.01

Tested on issue congruence per issue area - Relative congruence

Source: 2009 EU Profiler

issue areas show a statistically significant difference (see Table 22 on page 233).

As it can be seen in Table 23, the *absolute citizen congruence* scores are positively correlated with the effective number of parties and disproportionality of the system, but present a negative, although small, correlation with district magnitude,

polarization and old democracy. Even though new countries were added to the dataset, the correlation coefficients between the country level predictors do not change much.

Table 23: Correlation Matrix - Absolute citizen congruence EUvox

	1	2	3	4	5	6
1. Congruence	-					
2. EFNP	0.05***	-				
3. LSq	0.18***	-0.72***	-			
4. District magnitude	-0.01***	0.24***	-0.20***	-		
5. Polarization	-0.15***	0.18***	-0.21***	0.24***	-	
6. Old democracy	-0.27***	0.02***	-0.03***	-0.27***	-0.06***	-
Note:						*p<0.1; **p<0.05; ***p<0.01

N = 150382 , Source: 2014 EUvox

The variation in congruence scores across the issue areas has been tested for and the results of the tests are presented in Table 24. As the low p-values suggest, the variation across the different issue dimensions, observed in Figure 11 and Table 8 is not due to chance.

Table 24: Summary of variation tests

Test name	Test statistic	p-value
Asymptotic	58292.2	0
M-SLRT	62419.28	0
Note:		*p<0.1; **p<0.05; ***p<0.01

Tested on issue congruence per issue area - Absolute citizen congruence
Source: 2014 EUvox

The difference in variation in congruence scores across issue categories visible in Figure 11 on page 124 is tested using the 'Asymptotic test for the equality of coefficients of variation from k populations' and the 'Modified signed-likelihood ratio test for equality of CVs'. The results are presented in Table 25. The low p-values suggest that the variation across the different issue dimensions is not due to chance.

Table 25: Summary of variation tests

Test name	Test statistic	p-value
Asymptotic	35.71	0
M-SLRT	36.26	0
Note:	*p<0.1; **p<0.05; ***p<0.01	

Tested on issue congruence per issue area - Relative congruence

Source: 2014 EUvox

Table 26: Correlation Matrix - Relative congruence EUvox

	1	2	3	4	5	6
1. Congruence	-					
2. EFNP	0.07	-				
3. LSq	0.09	-0.56***	-			
4. District magnitude	0.20**	0.11	-0.01	-		
5. Polarization	0.02	0.26***	0.13	0.41***	-	
6. Old democracy	-0.27***	-0.15*	0.05	-0.37***	-0.28***	-
Note:					*p<0.1; **p<0.05; ***p<0.01	

N = 168

Source: 2014 EUvox

Table 27: Baseline models - Absolute citizen congruence EUP

ICC	Overall	Economy	Social	EU
	0.10	0.08	0.20	0.14

Source: 2009 EU Profiler

Formula of the linear mixed model: congruence 1 + (1 — country)

Table 28: Baseline models - Relative congruence EUP

ICC	Overall	Economy	Social	EU
	0.04	0.04	0.02	0.00

Source: 2009 EU Profiler

Formula of the linear mixed model: congruence 1 + (1 — country)

Table 29: Baseline models - Absolute citizen congruence EUvox

ICC	Overall	Economy	Social	EU
	0.34	0.18	0.50	0.34

Source: 2014 EUvox

Formula of the linear mixed model: congruence 1 + (1 — country)

Table 30: Baseline models - Relative congruence EUvox

ICC	Overall	Economy	Social	EU
	0.18	0.07	0.36	0.10

Source: 2014 EUvox

Formula of the linear mixed model: congruence 1 + (1 — country)

8.3 Appendices Chapter 5

Table 31: Party level predictors - EU Profiler

Country	Party	Niche	GovStat	RiLe	ElCycle
Belgium Fr	CDH	0	1	0	0.66
	MR	0	1	1	0.66
	Ecolo (PEF)	1	0	0	0.66
	PS	0	0	99	0.66
Belgium Nl	CDV Vlaams	0	1	1	0.66
	GROEN !	1	0	0	0.66
	LD	0	0	1	0.66
	NVA	1	0	1	0.66
	OVLD	0	1	1	0.66
	PA_Benl	0	0	0	0.66
	SLP	0	0	1	0.66
	VB	1	0	1	0.66
	SPA	0	0	0	0.66
Germany	BDG	1	0	0	0.92
	DR	1	0	1	0.92
	DV	1	0	99	0.92
	NEWROP	0	0	99	0.92
	SPD	0	0	0	0.92
England	BNP	1	0	1	0.81
	Green	0	0	99	0.81
	Labour	0	0	99	0.81
	LibDem	0	0	0	0.81
	Tori	0	0	1	0.81
	UKIP	1	0	1	0.81
Spain	ERC	0	0	0	0.33
	BNG	0	0	0	0.33
	CPC	0	0	1	0.33
	ICV	0	0	0	0.33
	IU	0	0	0	0.33
	PD	0	0	99	0.33
	PP	0	0	1	0.33
	PSOE	0	0	0	0.33
	UPD	0	0	99	0.33
France	AL	0	0	1	0.39
	FN	1	0	1	0.39
	LO	0	0	0	0.39
	LV	1	0	0	0.39
	MD	0	0	1	0.39
	MNR	0	0	1	0.39
	MPF	0	0	1	0.39
	NEWROP	0	0	99	0.39
	MRC	0	0	0	0.39
	PCF	0	0	0	0.39
	PRG	0	0	0	0.39
	PS	0	0	99	0.39
	UMP	0	1	1	0.39
Italy	FT	0	0	1	0.23
	LN	1	1	1	0.23
	PD	0	0	0	0.23
	PL	1	1	1	0.23
	PRC	0	0	0	0.23
	SL	0	0	0	0.23
	UDC	0	0	1	0.23
	VI	0	0	99	0.23
Netherlands	CDA	0	1	1	0.72
	D1966	1	0	99	0.72
	GL	1	0	0	0.72
	LDP	0	0	99	0.72
	PA	0	0	99	0.72
	PD	1	1	99	0.72
	PV	0	0	99	0.72
	SP	0	0	0	0.72
	VNEWR	0	0	99	0.72

	VVD	0	0	1	0.72
Poland	PO	0	0	0	0.41
	PPC	0	0	0	0.41
	LPR	0	0	1	0.41
	PS	0	0	99	0.41
	PSL	0	1	1	0.41
	SLD	0	0	0	0.41
	UPR	0	0	1	0.41
Portugal	MEP	0	0	99	0.93
	CDU	0	0	99	0.93
	PS	0	0	99	0.93
	PSD	0	0	99	0.93
Sweden	CENT	1	1	1	0.67
	FL	0	1	1	0.67
	JUN	0	0	1	0.67
	KD	1	1	1	0.67
	MG	1	0	0	0.67
	MS	0	1	1	0.67
	SA	0	0	99	0.67
	SD	0	0	1	0.67

Source: 2009 EU Profiler

Table 32: Congruence scores at party leve - EU Profiler

		Overall		Economy		Social		EU	
Party	Country	Abs	Rel	Abs	Rel	Abs	Rel	Abs	Rel
Belgium Fr	CDH	67.51	78.67	63.91	77.00	60.85	82.00	74.94	77
	MR	68.91	75.33	65.51	78.00	59.99	66.00	76.82	82
	Ecolo (PEF) 74.21	100.00	69.78	100.00	78.63	100.00	79.20	100	
	PS	73.57	86.00	70.15	78.00	76.99	86.00	78.26	94
	CDV Vlaams	73.23	79.67	71.40	79.00	71.79	83.00	77.46	77
	GROEN !	78.17	89.67	74.80	79.00	88.27	98.00	82.53	92
	LD	72.69	75.33	72.32	79.00	72.12	68.00	73.56	79
	NVA	76.38	89.67	75.22	92.00	78.44	93.00	77.95	84
	OVLD	77.15	100.00	72.27	100.00	85.10	100.00	82.67	100
	PA_Benl	75.87	87.67	75.45	85.00	78.75	93.00	75.00	85
	SLP	79.24	83.67	73.97	78.00	82.24	87.00	87.98	86
	VB	69.68	78.67	72.20	79.00	65.32	79.00	67.11	78
	SPA	77.24	85.67	75.83	87.00	85.66	93.00	76.01	77
Germany	BDG	62.39	73.33	60.93	74.00	47.40	66.00	68.92	80
	DR	74.31	84.33	77.39	88.00	68.59	84.00	71.79	81
	DW	78.55	94.00	78.19	93.00	82.00	100.00	78.17	89
	NEWROP	74.29	90.33	70.13	80.00	84.33	100.00	77.18	91
	SPD	73.57	82.67	74.32	85.00	66.81	79.00	75.45	84
England	BNP	83.18	96.67	78.68	90.00	91.18	100.00	90.59	100
	Green	70.44	74.00	75.85	84.00	72.18	82.00	57.68	56
	Labour	68.98	76.00	67.52	70.00	70.22	73.00	71.27	85
	LibDem	76.38	85.33	77.44	85.00	77.14	90.00	74.10	81
	Tori	67.49	79.00	70.68	82.00	65.34	85.00	62.13	70
	UKIP	72.10	96.33	72.48	90.00	79.65	100.00	69.61	99
Spain	ERC	78.09	88.00	76.65	90.00	83.73	86.00	78.16	88
	BNG	79.44	88.00	81.25	95.00	86.01	96.00	72.42	73
	CPC	74.64	88.67	72.21	87.00	79.78	94.00	78.27	85
	ICV	83.15	91.67	82.53	92.00	83.04	83.00	85.00	100
	IU	83.74	94.67	83.78	84.00	95.74	100.00	77.36	100
	PD	73.82	83.67	70.45	78.00	68.18	80.00	83.12	93
	PP	66.57	78.33	62.86	72.00	72.63	87.00	72.21	76
	PSOE	78.74	83.67	77.22	84.00	78.73	75.00	81.79	92
	UPD	71.08	87.00	63.81	70.00	80.15	100.00	79.51	91
France	AL	69.01	82.00	67.57	87.00	67.92	73.00	73.08	86
	FN	66.75	72.67	68.93	78.00	72.66	79.00	59.38	61
	LO	68.57	73.67	73.10	68.00	68.75	78.00	59.52	75
	LV	76.76	85.67	75.99	85.00	78.29	89.00	78.05	83
	MD	70.34	75.67	70.15	74.00	52.00	58.00	81.12	95
	MNR	71.61	85.00	71.43	81.00	76.56	94.00	68.75	80
	MPF	72.50	87.33	68.65	83.00	73.08	85.00	78.53	94
	NEWROP	78.33	76.00	78.23	54.00	58.14	100.00	80.96	74
	MRC	72.20	79.33	73.58	82.00	79.46	85.00	66.46	71
	PCF	75.34	82.00	81.73	95.00	71.01	76.00	65.49	75
	PRG	71.69	80.00	69.74	79.00	76.89	88.00	72.92	73
	PS	78.22	86.67	77.11	84.00	76.98	91.00	81.62	85
	UMP	71.95	85.33	66.74	78.00	71.13	87.00	80.65	91
Italy	FT	67.69	77.67	66.22	70.00	67.86	75.00	70.54	88
	LN	68.12	73.67	70.20	82.00	69.91	77.00	63.84	62
	PD	75.06	83.00	73.34	80.00	61.00	81.00	82.04	88
	PL	73.86	84.67	75.00	88.00	66.94	84.00	76.02	82
	PRC	76.65	85.33	77.90	84.00	82.14	97.00	71.72	75
	SL	77.97	83.67	76.53	84.00	78.39	88.00	81.28	79
	UDC	76.23	89.67	73.14	86.00	72.73	92.00	82.65	91
	VI	73.66	80.33	74.08	85.00	53.74	72.00	79.45	84
Netherlands	CDA	72.20	74.33	73.57	86.00	72.23	64.00	69.43	73
	D1966	75.21	82.33	73.91	78.00	79.45	91.00	75.67	78
	GL	80.51	88.67	81.45	97.00	82.90	88.00	77.42	81
	LDP	77.58	83.33	76.27	85.00	78.19	82.00	79.58	83
	PA	77.64	83.00	77.73	87.00	81.86	90.00	75.33	72
	PD	73.25	83.33	73.99	84.50	76.78	87.50	69.97	78
	PV	73.09	88.67	73.14	88.00	81.82	95.00	68.63	83
	SP	73.91	87.67	73.94	84.00	82.81	100.00	69.37	79
	VNEWR	74.09	78.67	74.14	83.00	71.88	70.00	74.30	83
	VVD	71.34	85.00	67.69	75.00	79.03	88.00	74.80	92

Poland	PO	70.40	82.00	70.65	87.00	51.05	71.00	77.41	88
	PPC	78.53	84.33	74.96	93.00	73.86	67.00	88.44	93
	LPR	65.34	73.67	61.93	68.00	71.25	72.00	66.67	81
	PS	69.04	89.67	62.44	77.00	81.46	100.00	74.36	92
	PSL	67.08	62.67	60.00	58.00	50.00	54.00	80.21	76
	SLD	71.73	80.33	63.33	76.00	79.29	80.00	78.35	85
	UPR	71.63	86.67	74.96	84.00	57.75	83.00	73.55	93
Portugal	MEP	73.81	81.00	73.04	80.00	72.41	77.00	77.14	86
	CDU	69.44	76.67	75.50	76.00	67.50	76.00	56.25	78
	PS	69.83	86.33	68.24	78.00	72.14	94.00	75.00	87
	PSD	69.16	85.00	69.27	75.00	71.61	91.00	66.34	89
Sweden	CENT	71.75	86.00	70.81	81.00	68.53	92.00	74.45	85
	FL	72.74	87.00	72.61	89.00	68.69	89.00	75.03	83
	JUN	68.01	79.33	73.59	91.00	52.86	72.00	66.90	75
	KD	68.88	84.00	70.04	78.00	65.87	90.00	68.21	84
	MG	67.15	87.00	73.62	81.00	73.26	89.00	51.32	91
	MS	71.73	81.33	71.87	83.00	66.64	82.00	74.02	79
	SA	73.40	86.33	77.25	90.00	69.74	91.00	67.46	78
	SD	74.42	92.33	74.99	97.00	76.21	89.00	72.75	91
Mean	Niche	73.16	82.42	73.16	81.09	71.74	83.32	74.36	82.88
Mean	Mainstream	72.30	85.50	71.74	85.50	70.62	88.32	73.28	82.66

Source: 2009 EU Profiler

Table 33: Party level predictors - 2014

Party	Country	Niche	GovStat	RiLe	ElCycle
Austria	BZO	0	0	2	0.13
	DG_At	1	0	0	0.13
	EUSTOP	0	0	2	0.13
	FPO	1	0	2	0.13
	SPO	0	1	0	0.13
	NEOS	0	0	1	0.13
	REKOS	0	0	2	0.13
	OVP	0	0	2	0.13
	UA	0	0	1	0.13
Bulgaria	ABC	0	0	0	0.74
	Attack	0	0	2	0.74
	BSP	0	1	0	0.74
	BwC	0	0	2	0.74
	DPS	0	0	0	0.74
	GERB	0	0	2	0.74
	NFSB	0	0	2	0.74
	ReformistBloc	0	0	2	0.74
Czech Republic	ANO	0	1	2	0.16
	CSSD	0	1	0	0.16
	KSCM	0	0	0	0.16
	TOP	0	0	2	0.16
	ODS	0	0	2	0.16
	SVO	0	0	2	0.16
	SZ	0	0	0	0.16
	KDUCSL	0	0	2	0.16
Germany	AfD	0	0	2	0.16
	CDUCSU	0	1	2	0.16
	FDP	0	0	2	0.16
	SPD	0	1	0	0.16
	DL	0	0	0	0.16
	DG	1	0	0	0.16
Denmark	DF	0	0	2	0.71
	DK	0	0	2	0.71
	FolkEU	0	0	2	0.71
	Venstre	1	1	1	0.71
	LA	0	0	2	0.71
	RV	0	0	0	0.71
	SD	0	1	0	0.71
	SF	0	0	0	0.71
Estonia	EER	0	0	0	0.75
	EK	0	0	0	0.75
	IRL	0	0	2	0.75 6
	Reformierakond	0	1	2	0.75
	Rohelised	0	0	0	0.75
	SDE	1	1	0	0.75
	Keskerakond	0	0	1	0.75
England	Green En	1	0	0	0.81
	UKIP En	1	0	2	0.81
	Labour En	0	0	0	0.81
	Tori En	0	1	2	0.81
	LibDem	0	1	1	0.81
Spain	UPyD	0	0	2	0.61
	VOX	0	0	2	0.61
	Podemos	0	0	0	0.61
	PP	0	1	2	0.61
	PSOE	0	0	0	0.61
	EquoCompromis	0	0	0	0.61
	BilduBNG	0	0	0	0.61
	CiUPNV	0	0	2	0.61
	IU	0	0	0	0.61
	ERC	1	0	0	0.61
Finland	Vasemmistoliitto	0	1	0	0.77
	Vihrealiitto	1	1	0	0.77
	Kokoomus	0	1	2	0.77
	Kristillisdemokraatit	1	1	2	0.77

	Perussuomalaiset	0	0	2	0.77
	RKP	0	1	1	0.77 3
	SDP	0	1	0	0.77
	Keskusta	1	0	1	0.77
France	EELV	1	0	0	0.38
	FG_Fr	0	0	0	0.38
	FrontNational	0	0	2	0.38
	UMP	0	0	2	0.38
	UDIMoDem	0	0	2	0.38
	NPA	0	0	0	0.38
	PS Fr	0	0	0	0.38
	Rassemblementcitoyen	0	0	2	0.38
	DeboutlaRepublique	0	0	2	0.38
	ForceVie	0	0	2	0.38
Hungary	Fidesz	0	1	2	0.03
	MSZP	0	0	0	0.03
	Jobbik	1	0	2	0.03
	LMP	0	0	0	0.03
Ireland	FiannaFail	0	0	2	0.64
	FineGael	0	1	2	0.64
	Green	1	0	0	0.64
	Labour Ir	0	0	1	0.64
	Socialist	0	0	0	0.64
	SinnFein	1	0	0	0.64
Italy	LegaNord	1	0	2	0.23
	ForzaItalia	0	0	2	0.23
	ListaTsipras	0	0	0	0.23
	MCS	0	0	2	0.23
	NCDUdiC	0	0	2	0.23
	SceltaEuropea	0	0	1	0.23
	PartitoDemocratico	0	0	0	0.23
	FDI	0	0	2	0.23
Lithuania	DP	0	1	1	0.39
	LLRA	0	0	2	0.39
	LRLS	0	0	2	0.39
	LSDP	0	1	0	0.39
	LVZS	0	0	2	0.39
	TSLKD	0	0	2	0.39
	TT	0	1	2	0.39
Northern Ireland	Alliance	0	1	0	0.61
	DUP	0	1	2	0.61
	UUP	0	0	2	0.61
	SDLP	0	0	0	0.61
	SinnFein_NI	0	0	0	0.61
Netherlands	CDA	0	0	2	0.37
	CUSGP	1	0	1	0.37
	D1966	1	0	1	0.37
	50Plus	0	0	1	0.37
	GL	1	0	0	0.37
	VVD	0	1	2	0.37
	SP_Nl				0.37
	PvdA	0	1	0	0.37
	PvdD	0	0	0	0.37
	PVV	1	0	2	0.37
Poland	SP	0	0	1	0.64
	NP	0	0	2	0.64
	PO	0	1	0	0.64
	PR	0	0	2	0.64
	RN	0	0	2	0.64
	ETR	0	0	1	0.64
	SLDUP	0	0	0	0.64
	PSL	0	1	2	0.64
Portugal	BE	0	0	0	0.68
	Livre	0	0	0	0.68
	MPT	0	0	2	0.68
	PAN	0	0	0	0.68
	PPAliansaPortugalPSDCDSPP	0	0	2	0.62
	PS Pg	0	0	0	0.68
	CDUPCPPEV	0	0	0	0.68

	PCTPMRPP	0	0	0	0.68
Romania	PDL	0	0	2	0.49
	PMP	0	0	2	0.49
	PNL	0	0	2	0.49
	PPDD	0	0	0	0.49
	UDMR	0	1	2	0.49
	PSD	0	1	0	0.49
Scotland	Labour Sc	0	0	0	0.55
	Libdem Sc	0	0	0	0.55
	UKIP Sc	0	0	1	0.55
	Green Sc	0	0	0	0.55
	SNP	1	1	0	0.55
	Conservative	0	0	2	0.55
Slovakia	KDH	0	0	2	0.55
	ASNS	0	0	2	0.55
	NOVA	0	0	2	0.55
	OLaNO	0	0	1	0.55
	SMERSD	0	0	0	0.55
	SMK	0	0	2	0.55
	SaS	0	0	2	0.55
	SDKDS	0	0	2	0.55
	SNS	0	0	1	0.55
	MostHid	0	0	1	0.55
Slovenia	DeSUS	1	1	1	0.94
	SDS	0	0	2	0.94
	SD	0	1	0	0.94
	NSi	0	0	0	0.94
	DL	0	0	2	0.94
Wales	Labour Wl	0	1	1	0.61
	Libdem Wl	0	0	0	0.61
	Green Wl	0	0	1	0.61
	Tori Wl	0	0	2	0.61
	PC	1	0	0	0.61
	UKIP	1	0	0	0.61 -

Source: 2014 EUvox

Table 34: Congruence scores at party level - EUvox

		Overall		Economy		Social		EU	
Party	Country	Abs	Rel	Abs	Rel	Abs	Rel	Abs	Rel
Austria	BZO	62.26	85.88	59.00	87.52	57.50	87.11	67.78	83.02
	DG_At	73.70	62.32	68.29	46.51	69.24	48.90	80.19	51.06
	EUSTOP	70.96	67.32	67.08	60.60	41.83	55.40	79.22	85.96
	FPO	62.47	74.84	62.23	77.96	50.80	79.26	71.76	67.31
	SPO	66.41	70.90	65.54	69.89	59.16	61.16	72.56	81.66
	NEOS	70.28	71.31	64.76	68.68	58.13	48.91	81.51	96.35
	REKOS	55.38	55.13	50.48	59.59	43.66	44.35	64.10	61.46
	OVP	71.80	78.08	69.90	75.09	79.20	66.81	62.30	92.32
	UA	-	74.84	-	78.35	-	66.54	-	79.62
Bulgaria	ABC	74.34	86.04	72.30	78.42	77.35	87.76	73.78	91.95
	Attack	-	74.56	-	60.86	-	69.60	-	93.23
	BSP	65.80	76.36	64.97	74.77	62.94	74.03	68.45	80.29
	BwC	66.37	75.57	54.43	52.90	70.79	86.20	70.12	87.63
	DPS	66.39	77.05	67.23	75.01	64.12	70.82	67.28	85.30
	GERB	66.84	72.58	69.35	74.53	58.93	58.66	71.52	84.55
	NFSB	65.45	73.21	55.37	64.11	62.58	68.71	73.85	86.80
	ReformistBloc	71.01	70.16	65.29	56.57	63.80	61.24	78.20	92.68
Czech Republic	ANO	75.62	90.51	76.77	97.77	75.23	85.11	75.31	88.64
	CSSD	77.09	37.32	75.25	23.22	79.49	75.38	76.23	13.36
	KSCM	67.96	73.75	55.68	56.60	74.06	84.12	70.00	80.54
	TOP	77.49	84.40	73.35	74.75	77.17	86.72	80.00	91.73
	ODS	77.25	85.22	74.22	87.10	79.14	93.63	77.45	74.94
	SVO	70.82	77.11	74.64	84.28	65.00	73.08	75.56	73.97
	SZ	57.45	70.90	54.16	55.86	54.16	80.01	63.10	76.81
	KDUCSL	-	75.21	-	86.74	-	66.13	-	72.75
Germany	AfD	64.21	66.73	61.53	49.20	65.62	76.43	64.71	74.57
	CDUCSU	65.69	71.52	65.32	72.03	62.71	66.01	68.21	76.51
	FDP	65.43	74.21	68.95	77.88	56.10	64.56	70.24	80.17
	SPD	62.97	57.68	52.42	42.62	53.05	45.34	76.32	85.07
	DieLinke	61.55	70.07	60.03	67.52	47.84	45.29	71.59	81.75
	DieGrunen	69.05	70.07	71.09	71.36	56.43	45.29	77.93	84.55
Denmark	DF	63.13	67.91	56.59	59.54	55.32	57.92	72.61	86.28
	DK	65.09	76.25	51.05	62.77	43.52	69.65	71.24	89.94
	FolkEU	61.93	-	51.05	-	43.52	-	71.25	-
	Venstre	64.90	-	72.62	-	59.80	-	64.36	-
	LA	62.53	73.42	53.35	62.78	62.19	69.66	67.36	87.82
	RV	66.58	73.33	81.26	91.02	50.45	45.19	72.61	83.78
	SD	63.69	73.33	60.44	68.71	55.55	54.21	71.34	83.78
	SF	59.37	62.31	46.46	44.86	56.27	59.11	67.40	82.97
Estonia	EER	72.60						76.59	
	EK	70.07						73.07	
	IRL	72.67	75.14	61.39	61.93	71.26	72.72	80.01	90.76
	Reformierakond	75.45	78.46	62.98	75.13	78.13	54.83	80.25	90.10
	Rohelised	72.60	84.09	70.49	81.45	69.06	83.51	76.59	78.99
	SDE	72.43	81.77	71.34	81.46	70.18	83.92	74.54	79.94
	Keskerakond	-	82.31	-	86.39	-	70.75	-	83.98
England	Green En	-	64.30	-	74.80	-	67.83	-	51.20
	UKIP En	73.57	81.56	75.72	83.62	65.24	72.17	76.09	88.89
	Labour En	69.12	74.57	70.38	74.80	64.67	67.83	71.90	81.08
	Tori En	68.09	74.83	63.77	63.66	65.44	75.14	72.53	85.69
	LibDem	76.38	-	63.65	-	75.13	-	78.56	
Spain	UPyD	68.17	73.26	67.19	72.30	59.73	64.73	74.41	82.74
	VOX	51.68	64.60	60.73	70.31	38.60	57.11	55.73	66.40
	Podemos	55.07	59.63	55.51	63.77	28.52	29.72	72.83	85.40
	PP	63.06	72.37	63.76	70.38	55.94	67.91	68.89	78.82
	PSOE	64.28	62.03	66.75	97.53	41.27	26.97	78.32	61.57
	EquoCompromis	57.70	59.58	59.16	62.66	74.68	38.77	35.13	77.32
	BilduBNG	55.70	60.98	64.24	66.65	56.78	24.58	63.42	91.69
	CiUPNV	70.24	79.55	65.14	72.26	70.02	86.32	73.92	80.07
	IU	52.40	54.58	56.20	64.90	74.40	14.57	23.86	84.28
	ERC	56.02	45.81	52.24	46.08	73.42	40.06	39.24	81.29
Finland	Vasemmistoliitto	61.71	66.13	69.96	76.69	51.57	40.44	65.08	81.25
	Vihrealiitto	65.66	66.58	72.88	88.73	47.13	38.41	76.02	72.62
	Kokoomus	72.90	84.91	70.84	80.12	67.06	82.53	78.55	92.07

	Kristillisdemokraatit	67.36	76.57	76.47	88.97	59.39	57.12	69.65	83.61
	Perussuomalaiset	69.47	84.36	72.18	90.76	63.18	74.23	72.86	88.08
	RKP	72.58	80.11	72.10	91.26	61.78	56.94	81.17	92.13
	SDP	64.83	68.55	65.19	73.07	56.38	50.02	71.20	82.55
	Keskusta	72.90	86.81	74.61	80.12	68.44	78.16	75.04	95.87
France	EELV	62.53	61.50	45.72	44.40	64.97	65.80	69.99	74.31
	FG_Fr	56.60	62.20	50.76	59.77	57.62	57.14	59.10	69.68
	FrontNational	62.40	75.11	64.00	79.33	70.72	57.03	50.62	88.94
	UMP	67.94	77.38	67.19	78.89	61.65	66.30	73.91	86.93
	UDIMoDem	70.40	72.28	70.46	74.32	79.70	82.32	56.40	88.54
	NPA	54.98	61.70	45.35	51.09	58.26	69.93	57.72	64.08
	PS Fr	61.06	69.91	51.60	64.74	66.04	67.44	62.50	77.55
	Rassemblementcitoyen	-	74.63	-	89.70	-	65.74	-	68.45
	DeboutlaRepublique	56.66	72.36	55.10	78.99	56.12	56.07	57.84	82.01
	ForceVie	70.00	71.55	78.32	77.14	68.40	67.57	65.86	69.93
Hungary	Fidesz	72.48	77.84	75.76	86.65	65.17	61.94	76.36	84.92
	MSZP	-	78.16	-	79.59	-	71.25	-	83.71
	Jobbik	69.80	74.55	64.97	62.95	71.91	84.87	70.79	75.84
	LMP	69.51	72.04	63.46	76.41	63.10	61.02	77.72	78.68
Ireland	FiannaFail	68.72		78.88	79.59		68.73	76.47	88.32
	FineGael	67.58	68.38		65.15		61.81	75.14	78.16
	Green	67.07	58.46	75.41	?	53.05	?	74.47	58.46
	Labour Ir	66.43	65.66	?	61.59	?	51.91	78.59	83.47
	Socialist	58.59	64.25	57.21	66.71	50.36	56.70	65.76	69.33
	SinnFein	59.37	62.31	46.46	44.86	56.27	59.11	67.40	82.97
Italy	LegaNord	67.10	81.51	69.55	88.83	60.46	68.73	70.97	86.98
	ForzaItalia	67.32	80.51	69.27	82.10	72.83	68.73	59.69	91.07
	ListaTsipras	67.18	68.16	72.20	71.82	75.18	51.36	54.53	81.29
	M5S	67.72	77.91	71.20	83.16	71.76	71.12	66.28	79.45
	NCDUdiC	-	85.32	-	90.87	-	76.33	-	95.45
	SceltaEuropea	42.82	80.53	68.94	72.78	80.96	77.94	70.50	90.87
	PartitoDemocratico	72.70	78.82	77.60	72.78	81.68	52.41	57.76	93.17
	FDI	66.06	79.64	67.55	81.26	71.18	70.52	59.23	87.12
Lithuania	DP	64.77	67.63	63.59	62.13	56.29	56.07	71.13	84.69
	LLRA	70.47	84.58	67.59	80.36	65.48	78.13	74.47	95.24
	LRLS	65.04	59.69	60.97	53.92	55.46	48.59	74.74	76.58
	LSDP	63.35	66.86	65.07	71.41	54.49	49.41	69.31	79.76
	LVZS	60.10	78.03	69.32	86.13	53.74	56.45	59.97	91.51
	TSLKD	-	62.12	-	53.28	-	53.01	-	80.07
	TT	72.58	83.65	73.85		66.06		70.97	98.64
Northern Ireland	Alliance	65.64	74.97	71.04	77.23	67.22	65.40	61.36	82.29
	DUP	68.46	81.00	76.24	91.34	50.44	62.06	76.23	89.60
	UUP	67.98	75.96	70.20	82.84	59.48	60.16	73.45	84.89
	SDLP	67.45	-	60.94	-	65.37	-	76.04	
	SinnFein_NI	-	63.11	-	58.80	-	60.01	-	70.51
Netherlands	CDA	70.72	75.77	74.64	77.35	61.05	63.99	75.00	85.98
	CUSGP	66.81	75.06	68.08	66.33	65.13	72.86	67.43	86.01
	D1966	73.40	77.50	71.17	82.38	61.76	56.79	83.67	93.34
	50Plus	59.17	46.66	49.20		64.58		61.11	60.00
	GL	70.13	68.38	68.75	73.74	60.42	48.31	78.45	83.09
	VVD	61.32	62.13	63.30	66.59	51.77	52.91	67.90	66.89
	SP_Nl	-	61.57	-	54.55	-	58.91	-	70.35
	PvdA	67.48	70.16	69.23	80.62	60.19	61.75	72.20	68.11
	PvdD	60.99	69.45	65.23	82.33	53.57	61.51	64.51	64.50
	PVV	62.97	61.57	57.32	63.80	57.32	61.70	69.76	59.22
Poland	SP	64.18	66.15	67.41		55.21		69.34	74.76
	NP	63.12	70.71	48.35	54.97	63.55	74.17	71.04	82.98
	PO	71.33	74.13	67.77	70.22	67.99	78.28	75.89	73.90
	PR	68.52	75.95	74.69	84.09	58.26	65.91	71.90	77.84
	RN	67.64	69.66	56.59	54.34	60.32	58.83	79.96	95.81
	ETR	-	71.29	-	83.22	-	42.42	-	88.24
	SLDUP	-	59.77	-	49.06	-	53.47	-	76.79
	PSL	69.23	77.61	63.84	64.41	71.37	89.30	70.58	
Portugal	BE	61.62	63.19	50.08	55.49	58.82	56.06	70.32	78.02
	Livre	60.09	53.70	52.76	60.05	46.66	32.42	73.12	68.64
	MPT	61.32	60.97	59.98	55.52	53.86	50.29	69.77	77.11
	PAN	62.38	56.80	58.08	54.62	36.01	29.45	75.24	86.34
	PPAliansaPortugalPSDCDSPP	-	79.91	-	89.60	-	69.86	-	80.26
	PS Pg	69.34						77.66	

	CDUPCPPEV	-	60.76	-	57.14	-	44.30	-	80.84
	PCTPMRPP	-	67.33	-	59.45	-	60.84	-	81.68
Romania	PDL	71.07	74.15	71.41	67.34	65.66	72.84	75.11	82.28
	PMP	74.90	80.67	75.77	81.96	70.71	73.68	76.29	86.38
	PNL	73.42	83.95	72.37	80.69	71.36	78.79	75.61	92.38
	PPDD	60.89	69.10	48.19	49.39	62.99	70.85	66.16	87.05
	UDMR	74.24	91.68	74.24	97.63	71.70	86.46	76.45	90.96
	PSD	-	79.80	-	79.81	-	72.41	-	87.18
Scotland	Labour Sc	68.96	68.49	60.06	49.63	72.55	74.20	71.09	81.64
	Libdem Sc	75.03	82.24	?	79.60	?	89.12	71.88	77.99
	UKIP Sc	70.02	79.82	?	66.36	?	84.41	75.35	88.69
	Green Sc	?	69.86	?	68.55	?	90.57	?	50.44
	SNP	68.74	73.47	63.03	69.25	74.83	78.74	67.16	72.43
	Conservative	?	74.98	?	49.62	?	78.02	?	87.90
Slovakia	KDH	70.40	82.37	67.29	85.51	64.43	65.78	76.13	95.82
	ASNS	-	75.83	-	77.33	-	68.52	-	81.62
	NOVA	70.89	77.91	66.89	70.74	68.54	77.44	74.50	85.56
	OLaNO	53.29	80.28	?	85.38	?	60.29	72.31	95.15
	SMERSD	-	83.66	-	76.84	-	90.77	-	83.37
	SMK	71.50	85.87	70.69	88.00	66.15	76.49	74.81	93.13
	SaS	-	78.20	-	73.89	-	83.36	-	77.34
	SDKDS	-	85.72	-	76.84	-	85.03	-	89.60
	SNS	64.81	82.35	61.23	73.23	61.58	81.84	69.30	91.98
	MostHid	-	60.02	-	74.64	-	58.58	-	46.82
Slovenia	DeSUS	73.32	80.28	75.56	76.00	73.81	81.90	71.48	82.93
	SDS	70.18	77.44	69.52	70.47	62.38	76.93	76.64	84.92
	SD	63.69	70.81	57.07		73.47		71.34	72.33
	NSi	-	66.80	-	64.52	-	75.57	-	78.03
	DL	-	75.53	-	64.52	-	80.13	-	74.76
Wales	Labour Wl	68.61	65.95	57.24	46.49	72.37	69.91	71.97	81.46
	Libdem Wl	73.74	80.74	?	76.25	?	89.33	71.28	76.62
	Green Wl	?	71.43	?	72.18	?	90.34	?	51.77
	Tori Wl	69.79	60.50	62.73	74.55	70.52		73.13	85.58
	PC	68.59	72.97	59.75	61.41	76.50	84.63	67.30	72.86
	UKIP	70.20	-	62.27	-	69.93	-	74.71	-
Mean	Niche	65.54	72.54	62.49	70.66	56.60	65.50	73.14	81.24
Mean	Mainstream	66.62	71.60	69.08	71.06	62.91	68.48	67.92	75.2

Source: 2014 EUvox

Table 35: Cross tabulation Table - EU Profiler - Absolute citizen congruence

	Left	Centre	Right
Mainstream	23	24	28
Niche	6	2	10
N = 93			

Table 36: Cross tabulation Table - EU Profiler - Relative congruence

	Left	Centre	Right
Mainstream	28	18	30
Niche	7	1	10
N = 94			

Table 37: Crosstabulation Table - EUvox - Absolute citizen congruence

	Left	Centre	Right
Mainstream	53	13	73
Niche	9	2	5
N = 155			

Table 38: Crosstabulation Table - EUvox - Relative congruence

	Left	Centre	Right
Mainstream	54	16	78
Niche	11	3	6
N = 168			

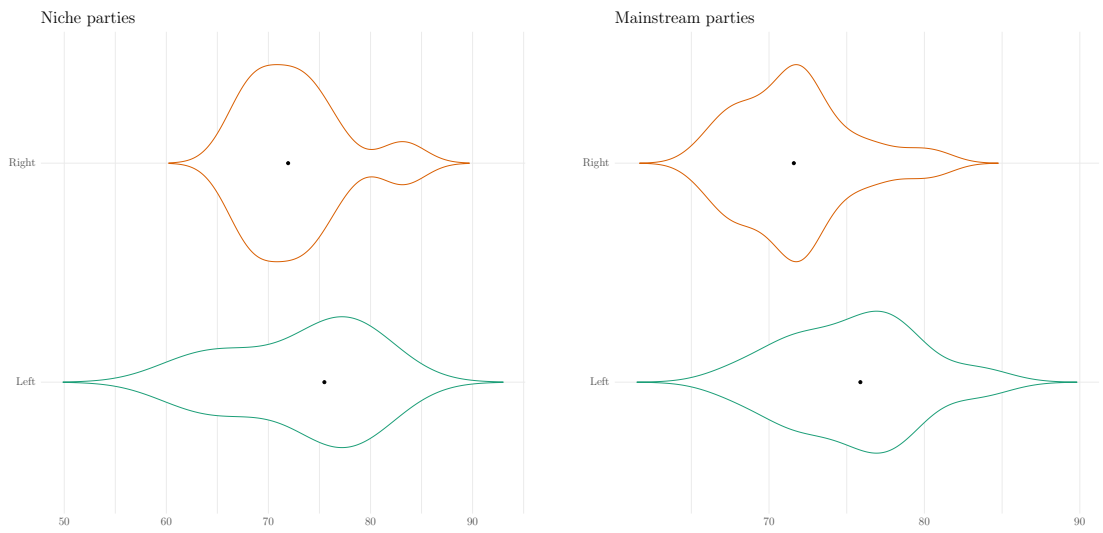

Figure 42: Violin plots - EU Profiler Absolute citizen congruence

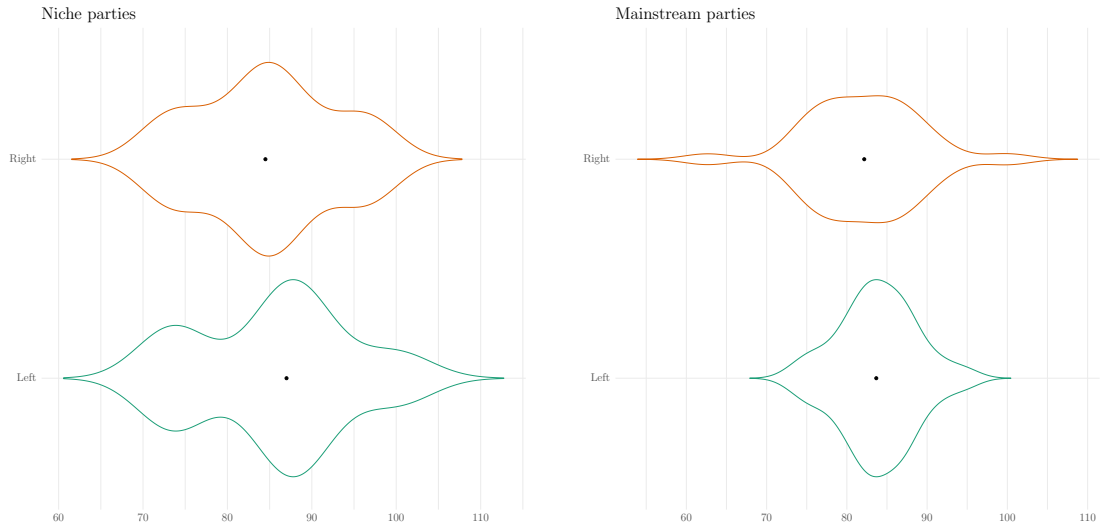

Figure 43: Violin plots - EU Profiler Relative congruence Niche vs mainstream

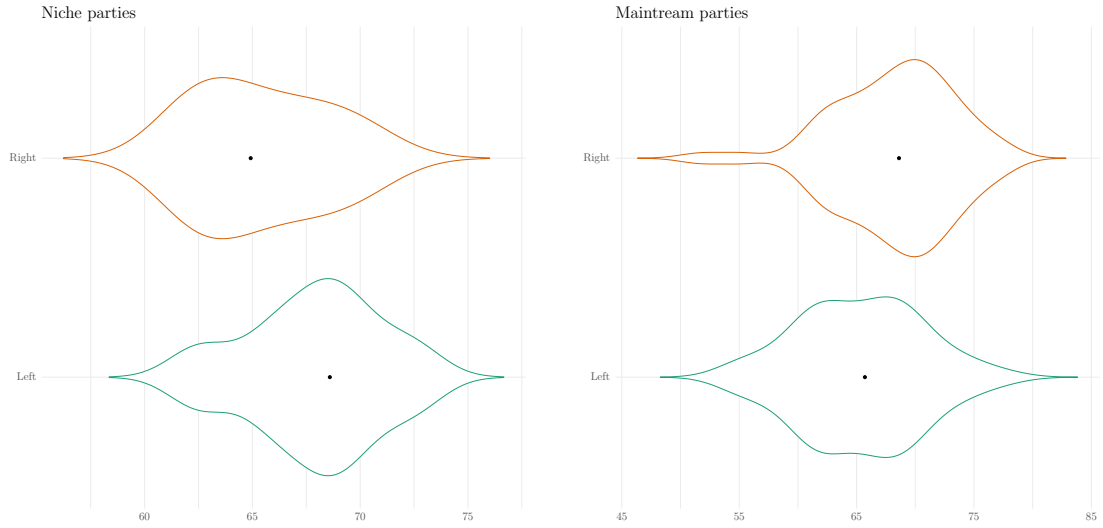

Figure 44: Violin plots - EUvox Absolute citizen congruence Niche vs mainstream

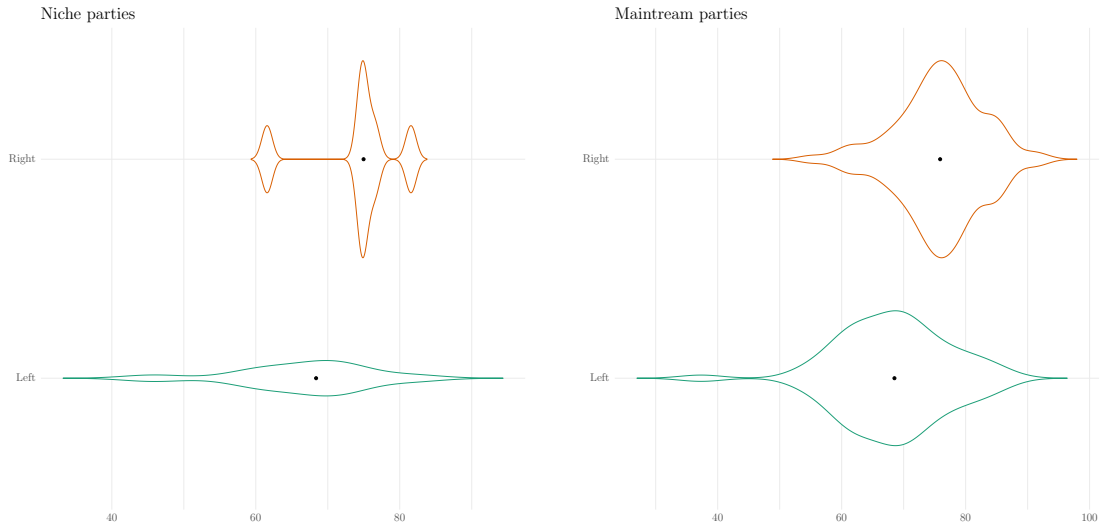

Figure 45: Violin plots - EUvox Relative congruence Niche vs mainstream

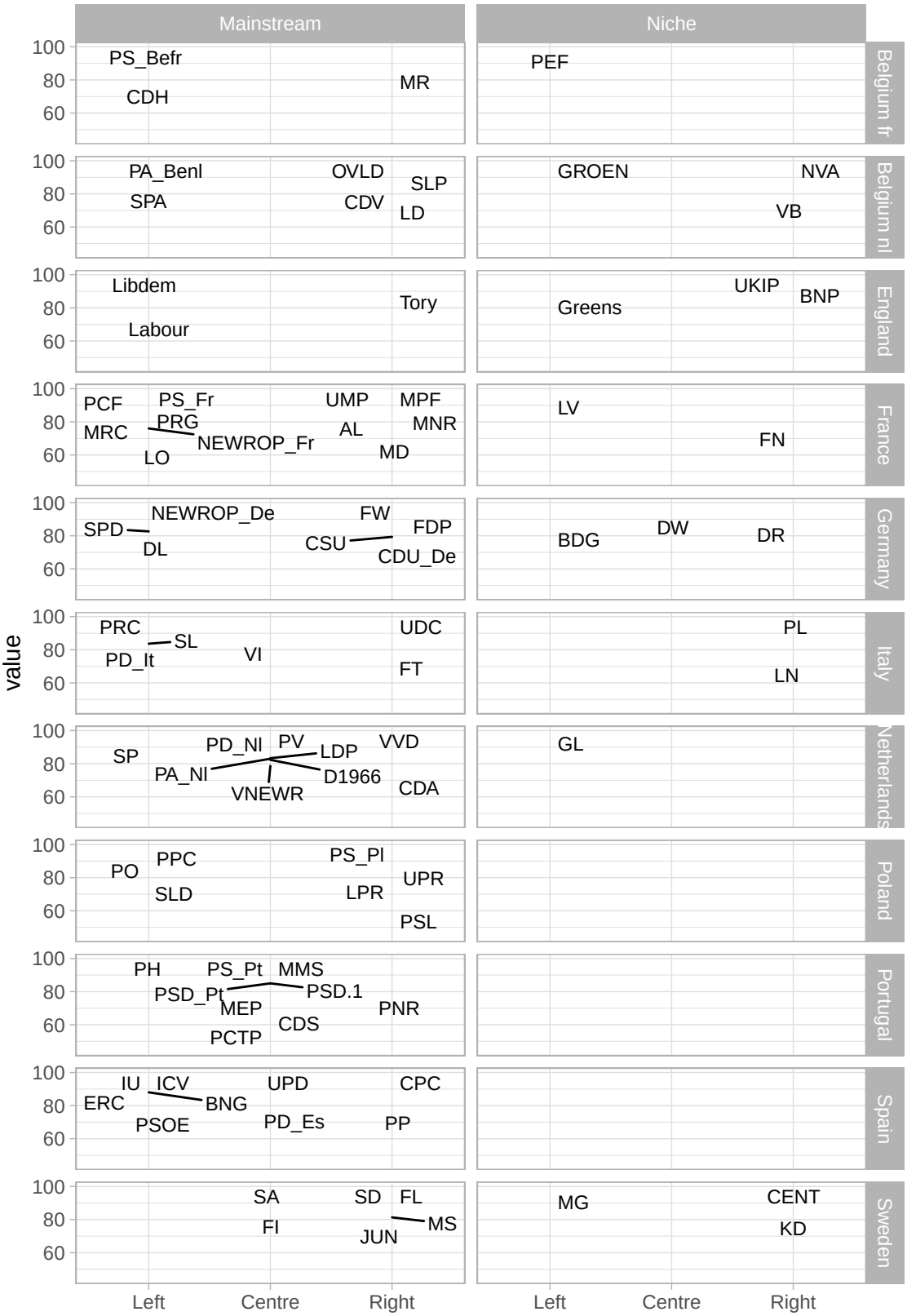

Figure 46: EU Profiler Relative congruence Niche vs mainstream 1a

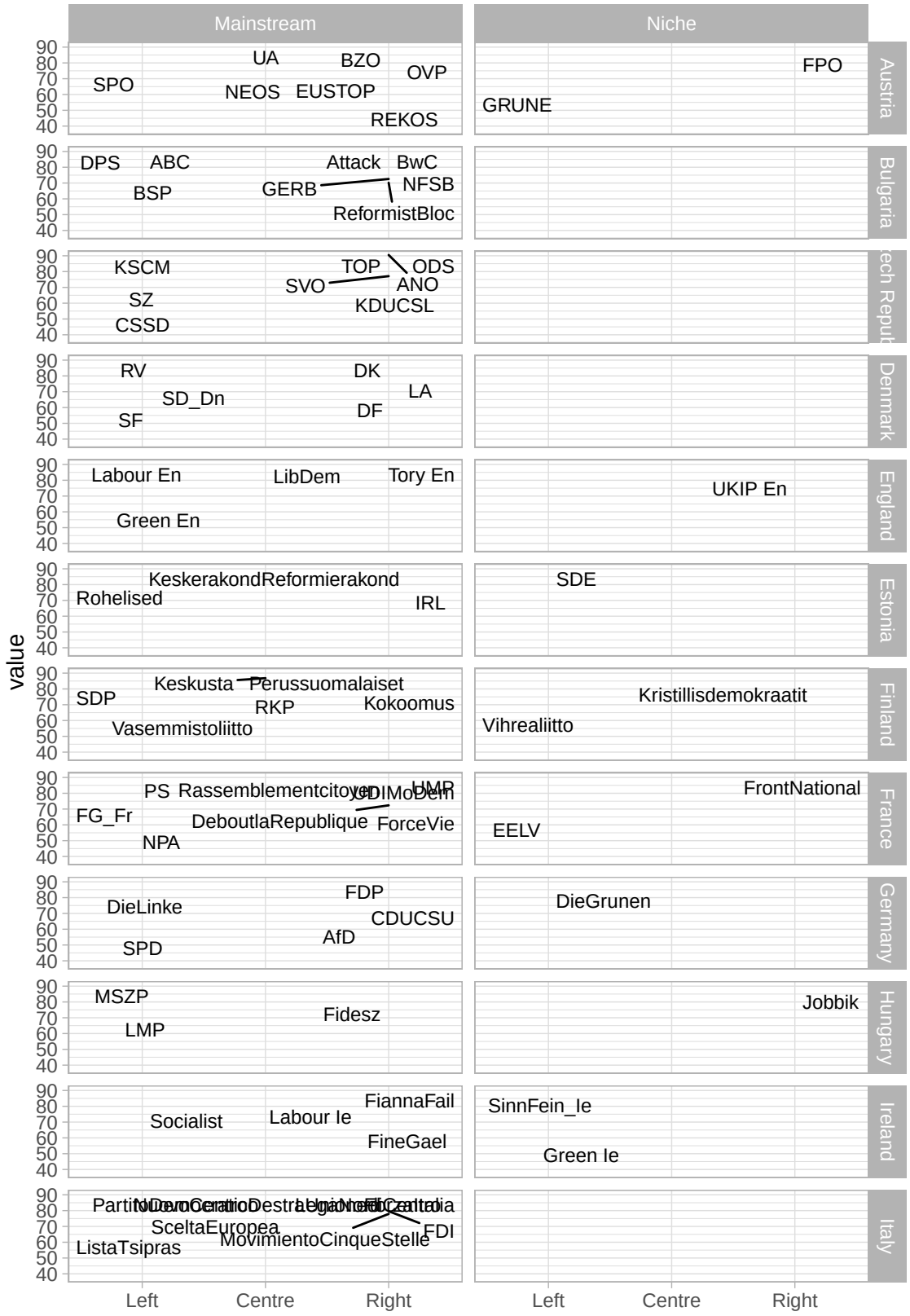

Figure 47: EUvox Relative congruence Niche vs mainstream 1b

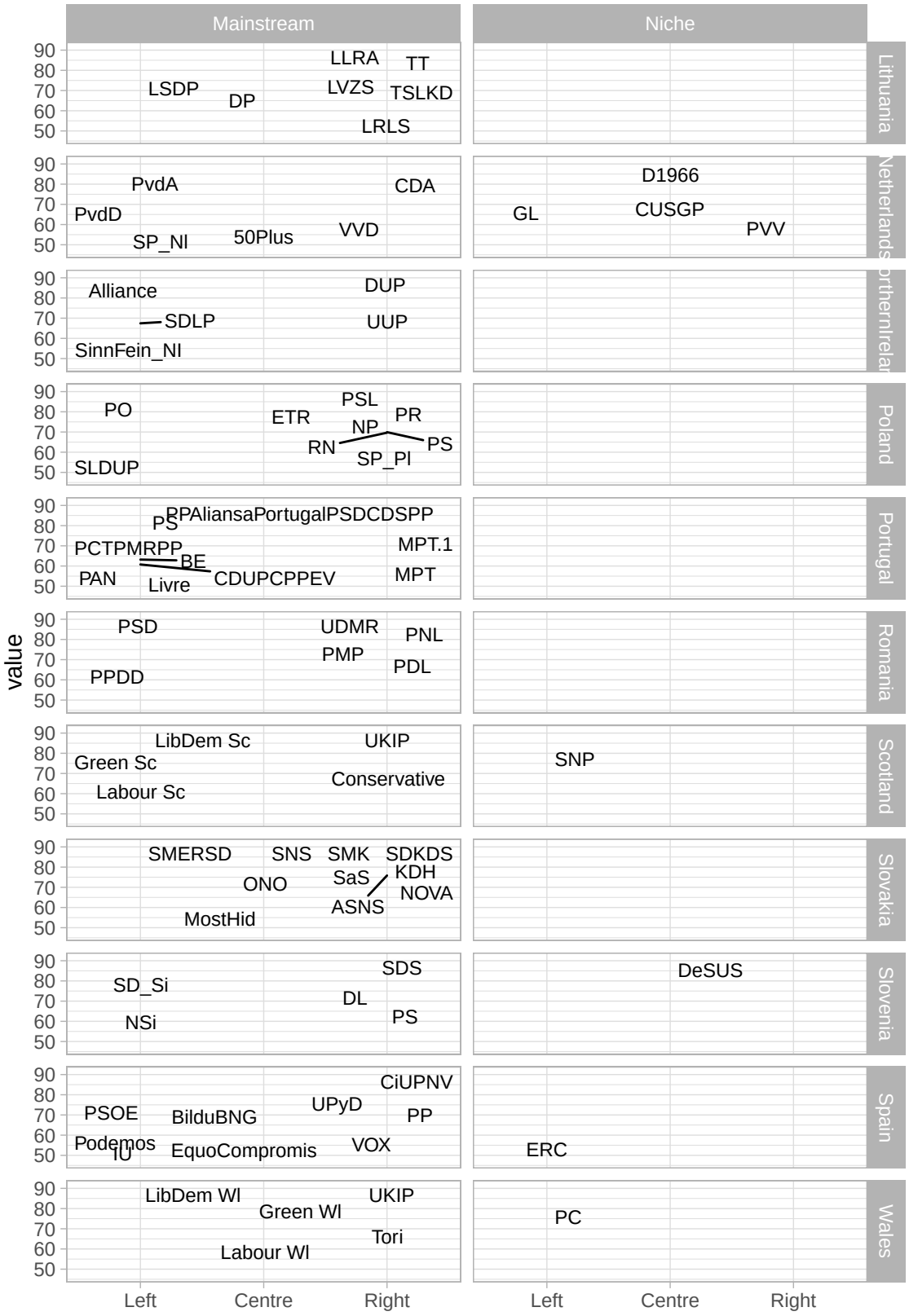

Figure 48: EUvox Relative congruence niche vs mainstream 1b

8.4 Appendices Chapter 6

Table 39: Baseline and Individual level models - EU Profiler

	Dependent variable:							
	Absolute citizen congruence							
		Overall.ipc		Economy.ipc		Social.ipc		EU.ipc
Age		−0.868***		−0.979***		−2.382***		0.079
		(0.083)		(0.103)		(0.181)		(0.137)
Male		0.423***		0.074		−1.571***		2.071***
		(0.160)		(0.199)		(0.348)		(0.263)
Education		0.464***		0.454***		0.436***		0.516***
		(0.060)		(0.074)		(0.130)		(0.098)
Political interest		1.151***		1.224***		0.748***		1.293***
		(0.106)		(0.132)		(0.231)		(0.175)
Extreme L-R		0.275***		0.393***		0.524***		0.011
		(0.048)		(0.060)		(0.105)		(0.079)
Constant	73.189***	69.190***	72.958***	68.992***	72.655***	73.857***	73.895***	66.720***
	(0.600)	(0.740)	(0.657)	(0.878)	(1.609)	(1.924)	(1.190)	(1.365)
Observations	11,406	11,406	11,405	11,405	11,328	11,328	11,345	11,345
Random variance party	14.00	13.20	21.86	20.53	66.52	64.40	41.58	40.78
Random variance country	1.98	2.15	1.72	2.50	18.44	21.68	9.52	8.86
Residual variance	58.21	56.45	89.28	87.16	272.38	266.44	154.88	152.50
ICC party	0.20	0.18	0.02	0.18	0.20	0.20	0.20	0.20
ICC country	0.02	0.04	0.02	0.02	0.05	0.04	0.06	0.06
Log Likelihood	−39,493.990	−39,184.100	−41,927.820	−41,627.630	−47,962.810	−47,778.650	−44,837.260	−44,751.850
Akaike Inf. Crit.	78,995.990	78,386.190	83,863.630	83,273.260	95,933.620	95,575.310	89,682.520	89,521.700
Bayesian Inf. Crit.	79,025.360	78,452.270	83,893.000	83,339.340	95,962.960	95,641.320	89,711.870	89,587.730

Note: *p<0.1; **p<0.05; ***p<0.01

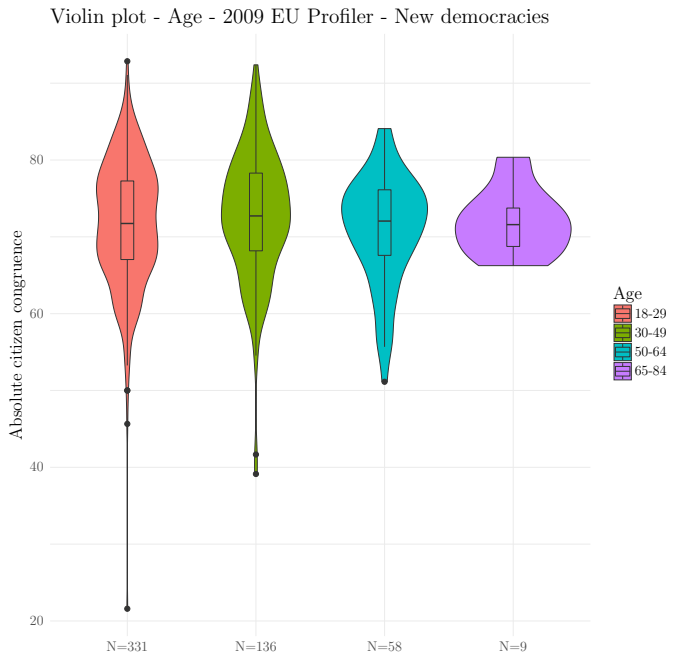

Figure 49: Age - New democracies - EU Profiler

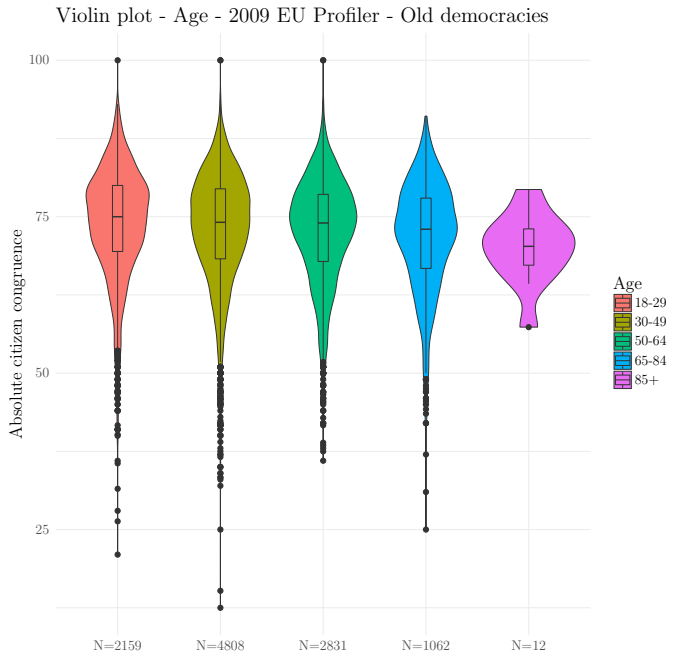

Figure 50: Age - Old democracies - EU Profiler

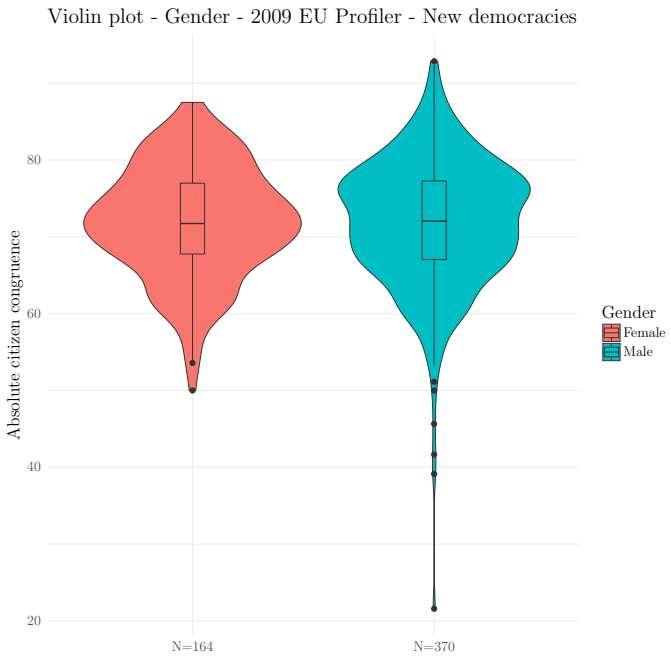

Figure 51: Gender - New democracies - EU Profiler

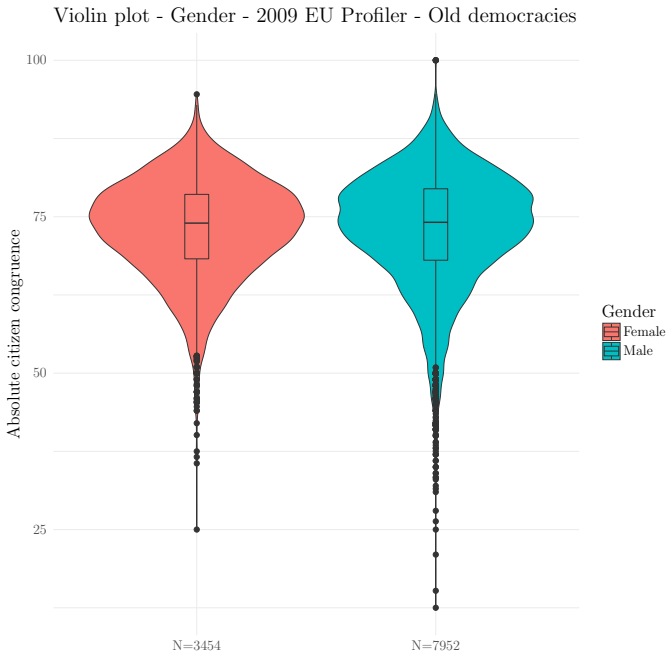

Figure 52: Gender - Old democracies - EU Profiler

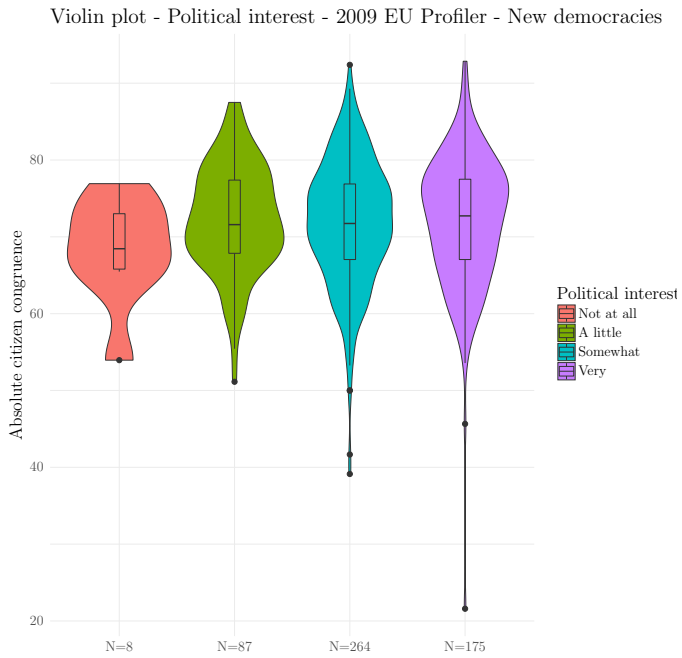

Figure 53: Political interest- New democracies - EU Profiler

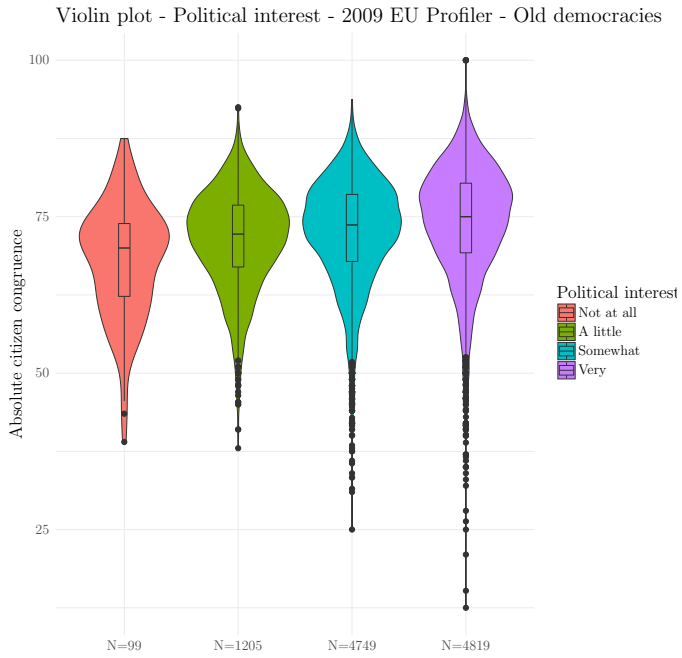

Figure 54: Political interest - Old democracies - EU Profiler

Table 40: Baseline and Individual level models - EUvox

	Dependent variable:							
	Absolute citizen congruence							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age		0.194***		0.235***		0.843***		−0.225***
		(0.018)		(0.034)		(0.031)		(0.028)
Male		0.076**		−0.157**		0.067		0.379***
		(0.037)		(0.068)		(0.062)		(0.056)
Education		0.274***		0.137***		0.053**		0.521***
		(0.015)		(0.028)		(0.025)		(0.023)
Political interest		0.132***		−0.632***		−0.879***		1.366***
		(0.023)		(0.043)		(0.039)		(0.035)
Constant	67.345***	65.670***	64.823***	65.458***	62.062***	62.220***	72.422***	67.645***
	(0.776)	(0.781)	(0.975)	(0.981)	(1.704)	(1.688)	(0.494)	(0.514)
Observations	150,382	150,382	150,333	150,333	150,338	150,338	150,379	150,379
Random variance party	17.54	17.38	49.42	49.06	53.64	53.48	23.54	23.42
Random variance country	10.08	10.12	11.58	11.44	54.94	53.32	0.92	1.06
Residual variance	37.70	37.54	130.16	129.90	107.96	107.12	88.38	86.98
ICC party	0.28	0.28	0.26	0.26	0.26	0.26	0.22	0.20
ICC country	0.14	0.16	0.06	0.06	0.26	0.24	0.02	0.02
Log Likelihood	−486,605.500	−486,344.000	−579,581.700	−579,450.300	−565,573.300	−565,005.200	−550,623.400	−549,445.800
Akaike Inf. Crit.	973,218.900	972,704.000	1,159,171.000	1,158,917.000	1,131,155.000	1,130,026.000	1,101,255.000	1,098,908.000
Bayesian Inf. Crit.	973,258.600	972,783.300	1,159,211.000	1,158,996.000	1,131,194.000	1,130,106.000	1,101,294.000	1,098,987.000

Note: *p<0.1; **p<0.05; ***p<0.01

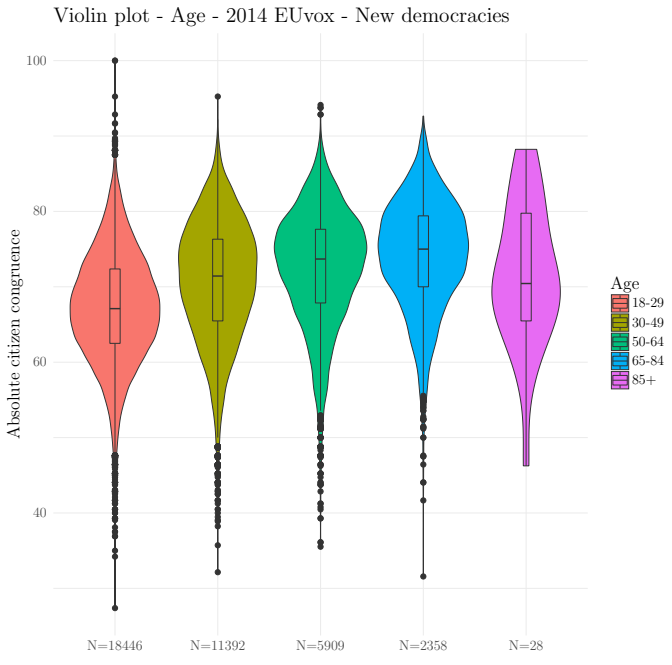

Figure 55: Age - New democracies - EUvox

Table 41: Extended individual level models - Countries in both EU Profiler and EUvox

	Absolute citizen congruence	
	Overall	
	2009 EU Profiler	2014 EUvox
Age	−0.730***	0.277***
	(0.095)	(0.026)
Male	0.505***	0.321***
	(0.186)	(0.052)
Education	0.367***	0.228***
	(0.066)	(0.019)
Political interest	1.006***	0.414***
	(0.126)	(0.033)
Left-Right self-placement	0.446***	
	(0.056)	
EFNP	−0.120	0.641
	(0.979)	(0.512)
Polarization	−0.966	−3.465**
	(1.133)	(1.404)
Disproportionality	−1.686	0.785
	(1.307)	(0.951)
Old democracy	5.380**	−0.173
	(2.681)	(3.371)
District magnitude	−0.867	0.060
	(1.012)	(0.864)
Niche	1.223	1.270
	(1.437)	(3.021)
Governmental status	2.929	3.888
	(1.932)	(3.027)
Right	−3.904***	3.191
	(1.347)	(2.706)
Centre	−1.298	1.681
	(1.339)	(1.687)
Election cycle	−2.096	−0.055
	(1.456)	(0.838)
Governmental status * Election cycle	0.758	1.563
	(2.221)	(1.452)
scale(LSq):as.factor(niche)1	0.833	0.331
	(1.144)	(1.411)
Constant	66.040***	60.027***
	(2.699)	(3.256)
Observations	8,025	79,391
Random variance party	14.30	20.86
Random variance country	1.86	1.68
Residual variance		36.26
ICC party	0.22	0.34
ICC country	0.00	0.02
Log Likelihood	−27,388.420	−255,284.400

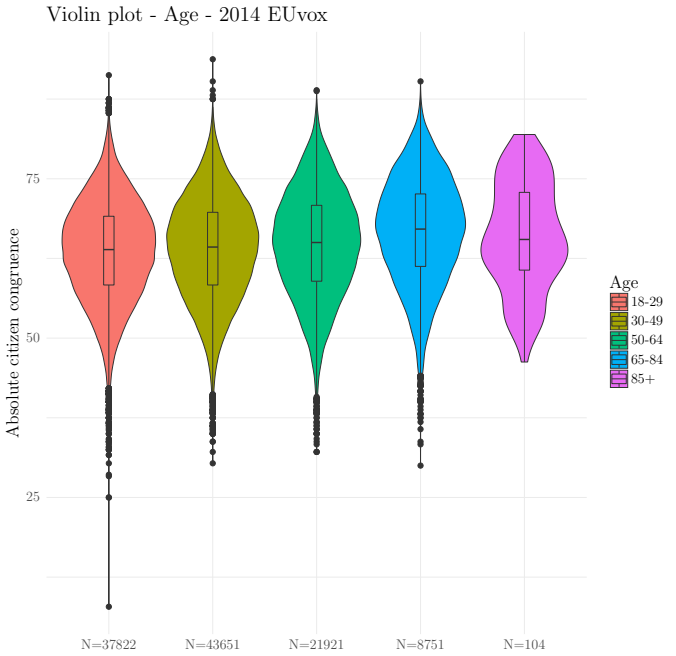

Figure 56: Age - Old democracies - EUvox

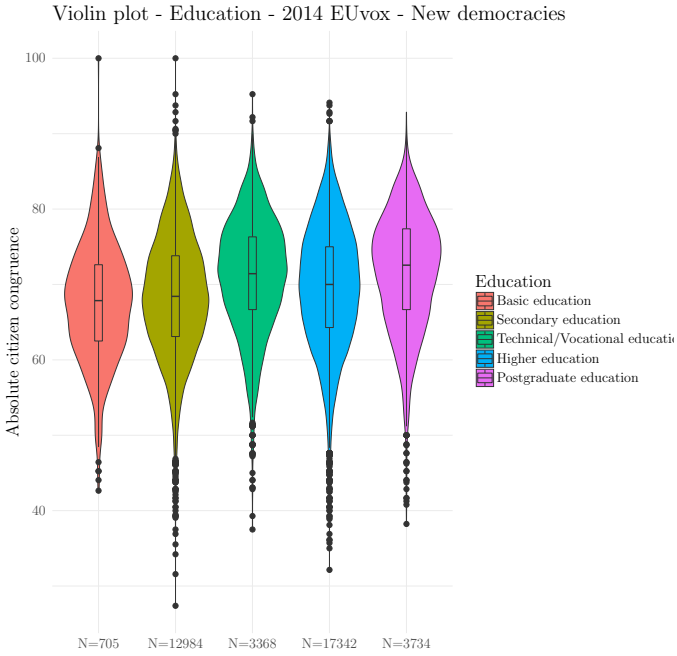

Figure 57: Education - New democracies - EUvox

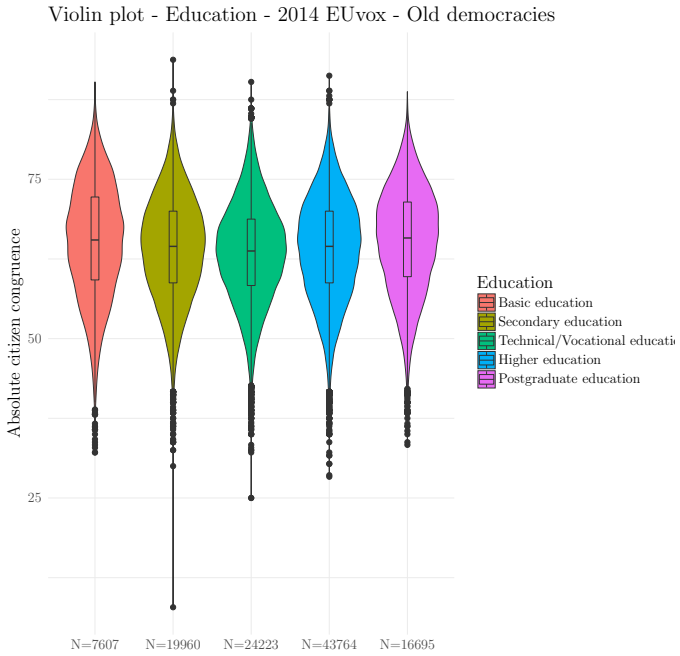

Figure 58: Education - Old democracies - EUvox